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BALL MUM GUIDE

1952

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DEC 2 3 1951

U. S. Department of Agriculture

The Mum business is undergoing an exciting, revolutionary change. Techniques for off-season flowering are fast making Mums a profitable crop any or all of the 12 months instead of 2 or 3 as before. We believe this change is creating a demand for more Mums than were ever grown before. Interested? See page 30 for full details.

Her. K. Ball

GREENHOUSE and GARDEN MUM CUTTINGS

CARNATION CUTTINGS

BULBS

ROSE PLANTS

SMALL PLANTS

PLANT BANDS

WEST CHICAGO

George Ball
INC.

ILLINOIS

New Varieties for 1951

LARGE FLOWERING STANDARDS

WHITE

WILSON'S WHITE (Ian Wilson). Nov. 1. Intermediate incurved. Outstanding white standard for pots.

BRONZE and RED

NOMAGO (DePetris). Nov. 5. Bronze spider; the best of the bronze spider varieties.

YELLOW

DARK INDIANAPOLIS YELLOW (Yoder). Nov. 5. For pot plant use only. Somewhat shorter in growth habit than Ind. Yellow. 50 cuttings for \$3.50; 100-250, \$6.65 per 100; 300-450, \$6.30 per 100; 500-950, \$5.95 per 100; 1000-2450, \$5.60 per 100; 2500-up, \$5.25 per 100.

YELLOW MOELLER (Yoder). Dec. 3. Sport of Margaret Moeller. 50 cuttings for \$3.50; 100-250, \$6.65 per 100; 300-450, \$6.30 per 100; 500-950, \$5.95 per 100; 1000-2450, \$5.60 per 100; 2500-up, \$5.25 per 100.

POMPONS, SINGLES and ANEMONES

WHITE

LYRIC (Yoder). Oct. 5. Pure white intermediate daisy. Short compact habit; very uniform and showy. Very durable. An excellent early pot plant or fine dwarf garden type.

HORIZON (Yoder). Oct. 5. Pure white intermediate pompon. Stronger plant than White Wonder. Whiter and more double than Chris. Columbus. Larger, showier than Classic. An important early cut flower or landscape variety.

NORONA (DePetris). Oct. 15. White, medium, solid pompon. Very desirable for earliest shading under black cloth. A very free and productive variety possessing good growth habit. Use in place of Irene for early shading in the cloth house.

WHITE POPCORN (Yoder). Oct. 25. Cream white sport of Popcorn. No trace of pink in the flower at low temperatures. The most productive white pompon.

KEEPSAKE (Yoder). Oct. 25. Cream white pompon. About the size and form of Popcorn. Hard, durable flower. Taller and freer growth than Popcorn. For May thru July in the greenhouse and Aug. and Sept. in the cloth house. Prompt and uniform response to shade.

MADONNA (Yoder). Nov. 5. Intermediate white pompon of good clean growth. Variety just precedes Encore. Its place is in the spring program in May and June where it takes high temperatures well. Will show light pink tinges at low temperatures.

DYNAMO (Yoder). Nov. 10. White pompon. Very similar to Encore but greatly improves that variety in growth habit. Very high quality cloth house white pompon. Fine in May and June in the greenhouse.

SCULPTURE (Yoder). Nov. 15. Large ivory white daisy. Excellent in May and June. Very close to a White Valencia for cloth house, responding much faster than that variety and with considerably better production.

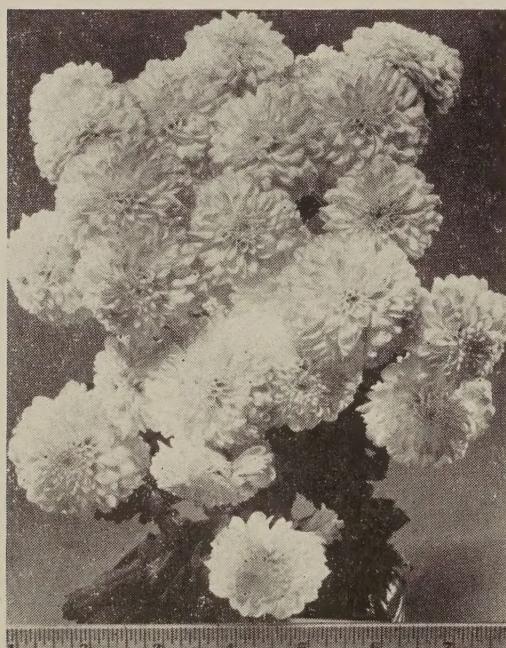
ESKIMO (Yoder). Nov. 15. Clear white Daisy. Fine form and excellent substance. Stands cloth house adverse conditions well. Very fine keeper and a very durable flower.

MONARCH (Yoder). Dec. 1. Ivory white, large decorative. Larger, harder flower than Cameo. Clean, vigorous growth. Responds rapidly and uniformly.

ACCLAIM (Yoder). Dec. 5. Large formal type pompon. Clean Omega type growth, no laterals. Follows Paramount and Fortune. Lights and shades well. As fine a formal pompon as exists. A white Corsair.

COTILLION (Yoder). Dec. 5. Intermediate semi-formal pompon. Very clear white. Heavily petalled, extreme substance. Short, easily controlled growth. Responds well and cuts uniformly. A late Encore with a very hard flower.

SNOWDROP (DePetris). Dec. 8. White button pompon with uniform growth and good production. Stems are strong and flowers possess a fairly good substance.



WHITE POPCORN

Clear white (no pink at low temperatures) sport of Popcorn. One of the heaviest producing Pompoms—at least 1 1/2 bunches per sq. ft. grown single stem.

PRICES above varieties except where noted: 50 cuttings for \$5.00; 100-250 cuttings, \$9.50 per 100; 300-450 cuttings, \$9.00 per 100; 500-950 cuttings, \$8.50 per 100; 1000-2450 cuttings, \$8.00 per 100; 2500 or more cuttings, \$7.50 per 100.

WHITE—Continued

SNOW QUEEN (DePetris). Dec. 10. Medium large formal white pompon of the purest white. Possesses very good substance. Sprays produced on good stems are well flowered. Good healthy and free growth. It is not vegetative. Not recommended for shading.

SATELLITE (Yoder). Dec. 15. Ivory White, formal intermediate pompon. Vigorous Silversmith habit. Very high class flower, especially brilliant under artificial light. Responds slowly but uniformly.

YELLOW

GARLAND (Yoder). Oct. 5. Intermediate yellow daisy. Compact vigorous growth. Garland has an exceptionally durable flower. A good early pot plant well adapted for gardens.

TREASURE (Yoder). Oct. 10. Small yellow pompon. Vigorous, upright habit. Fine cut flower growth. Flower is a small version of Gold Coast and very durable.

SUNUP (Yoder). Oct. 28. Small deep yellow pompon. A little smaller than Gold Coast and larger than Pixie. Harder and more durable than Gold Coast. A good producer which withstands high temperatures and heavy cropping better than Gold Coast. Recommended May thru October. Sharp uniform response.

BRIGADOON (Yoder). Nov. 5. Bright heavily petalled yellow Daisy. Excellent growth and production. Responds rapidly and uniformly. Wholesale shippers will welcome this type of daisy. Good May thru Oct.

ILLINI RYE (Univ. of Ill.). Nov. 12. Straw color intermediate pompon. Exceptional substance and stem strength. Very uniform. Shades well.

THOROBRED (Yoder). Nov. 15. Large yellow daisy. Good growth habit, fine production. Very easily grown. Excellent form, petallage and substance.

PIPPIN (Yoder). Nov. 20. Intermediate yellow pompon. Follows Lollipop and precedes Sunnyside, easily making Thanksgiving. Variety produces heavily on compound sprays. Shades well and lights well. Very dependable.

YELLOW PRISCILLA (Neal). Nov. 23. Deep lemon yellow, sport of the all-time favorite Priscilla.

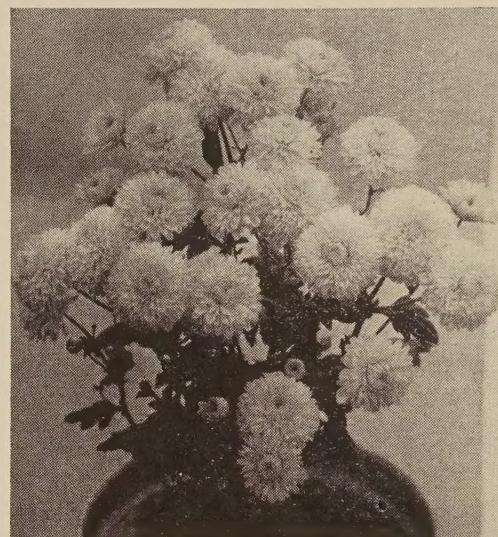
GOLDENROD (DePetris). Nov. 25. Full, round and solid yellow pompon with exceptional substance and keeping qualities. Can be kept on the plant for a long time without impairing the color, substance or form of the flower. Gives a heavy production of high quality sprays.

HIGHLANDER (Yoder). Nov. 25. Intermediate formal decorative. Better production and freer growth than Goldsmith. Highly dependable for production and quality. Very close to a Yellow Highbrow.

YELLOW VALENCIA (Yoder). Nov. 28. This is the sport of Valencia which was formerly known as Golden Jane. 50 cuttings for \$3.00; 100-250, \$5.70 per 100; 300-450, \$5.40 per 100; 500-950, \$5.10 per 100; 1000-2450, \$4.80 per 100; 2500-up, \$4.50 per 100.

PIPPIN

Another outstanding producer—at least 1½ bunches per sq. ft. grown single stem. Yellow Pomp, flowering naturally for Thanksgiving.



NOSEGAY (Yoder). Dec. 1. Small yellow pompon. Lively, durable; grows and produces like Omega. Can be flowered from October to April.

BRANDYWINE (Yoder). Dec. 5. A deep orange yellow decorative. Excellent growth habit, similar to that of Yuleflame. Season December thru February.

SYMMETRY (Yoder). Dec. 5. Int. yellow pompon. Stocky growth habit. Perfect form. Best for flowering in natural season.

JACK-POT (Yoder). Dec. 5. Very large, golden yellow decorative. A new peak in growth and form of flower has been achieved in this variety. It responds sharply and requires no disbudding. This variety approaches perfection in yellow pompons.

CORSAIR (Yoder). Dec. 12. Large yellow pompon. Outstanding for quality, vigor and production. A "best" for October 15 to March 15 in yellow pompons.

YELLOW SNOWCREST (Yoder). Dec. 15. A clear yellow sport of Snowcrest.

REVELRY (Yoder). Dec. 20. Intermediate light yellow decorative resembling Yellow Revelation with an improved flower quality. A dependable, late, low temperature, productive variety.

SUNRISE (Yoder). Dec. 20. A yellow pompon best described as a late Gold Coast. Sunrise is not sensitive to low night temperatures. A better growth habit than either Yellow Snow or Golden Anniversary.

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BRONZE and RED

FIRECRACKER (Yoder). Oct. 5. Mahogany bronze decorative, close to burnt orange. Tall, cut flower growth. The flower holds color well and is quite frost-resistant.

BLUEBLOOD (Yoder). Oct. 10. Deep amaranth red decorative. Vigorous cut flower growth. Color strongly resembles that of the old variety, Burgundy.

CARAVAN (Yoder). Oct. 10. Large salmon bronze decorative, garden type, compact rugged growth. Has all the good qualities of Mrs. DuPont, with a strikingly new and useful color.

ADMIRAL (Yoder). Oct. 12. Dark crimson red decorative. Plant is more vigorous and productive than Red Velvet; color is deeper and holds well.

COCKTAIL (Yoder). Oct. 15. Salmon orange pompon —a beautiful color. Growth is slow, variety attains medium height. A new color and distinctive form. A cut flower variety.

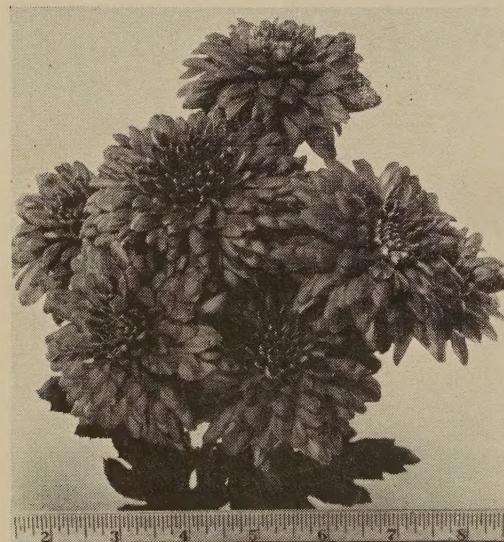
RAJAH (Yoder). Oct. 15. Large, scarlet red daisy. Very fine as cut flower. Holds color well in the field or early cloth house. Excels Red Daisy in color and growth habit.

BUCCANEER (Yoder). Nov. 1. Rich bronze daisy with very little fading even under high temperatures. Fine growth and production. Darker and richer bronze than Buckskin or Sylvania. This variety fills a long-felt need for a cloth house bronze daisy with petallage and substance.

ILLINI BURMA (Univ. of Ill.). Nov. 10. Light bronze; large pompon. Responds well to disbudding and partial disbudding. Satisfactory as a pot plant. Stiff stems and uniform, above average production.

BRONZE LINDA LOU (Yoder). Nov. 10. An important color sport of Linda Lou. 50 cuttings for \$4.00; 100-250, \$7.60 per 100; 300-450, \$7.20 per 100; 500-950, \$6.80 per 100; 1000-2450, \$6.40 per 100; 2500-up, \$6.00 per 100.

GOLD BRAID (Yoder). Nov. 12. A beautiful two-tone bronze pompon. Fine from September 15 to November 15.



PANDORA

Excellent luminous pink for late Sept. cloth house. Pictured is one spray.

SHALIMAR (Yoder). Nov. 15. Lively orange bronze anemone. Short, compact habit, well suited to pot plant culture or cut flowers. Sprays well or attains good size disbudded in pots. A useful improvement over Gypsy. A valuable variety to shade or delay.

BRONZE PRINCETON (Yoder). Nov. 15. Bronze sport of Princeton. Distinct from Red Princeton. 50 cuttings for \$3.25; 100-250, \$6.15 per 100; 300-450, \$5.85 per 100; 500-950, \$5.50 per 100; 1000-2450, \$5.20 per 100; 2500-up, \$4.85 per 100.

THELMA (DePetris). Nov. 20. Very brilliant orange-scarlet pompon. Excellent September 15 to Christmas. A beautiful red that never loses its brilliance. A sensation in the late cloth house.

AMBERINA (Yoder). Dec. 1. Bright orange-bronze intermediate decorative. Vigorous, clean growth. A late Princeton with very high production. Responds well and grows dependably under most any temperature or light condition.

DAZZLER (Helm). Dec. 5. Coppery bronze, partial Anemone type. Seedling of Yellow Valencia and Crimson Glow. Strong growing variety and a color that blends well.

HARLEQUIN (Yoder). Dec. 10. Crimson red intermediate decorative. Vigorous, wiry growth. Excellent low temperature variety. Fast, uniform response.

CLARET (Yoder). Dec. 15. A brilliant red daisy for Christmas. A short, stocky growth. Requires minimum of 55-60°F night temperature for best development.

TOPAZ (Yoder). Dec. 15. Warm, orange bronze single. Heavily petalled with good substance and vigorous, free growth. Will not go blind. Bronze, generally believed to be of slight value at this season, finds in Topaz a very brilliant color with is striking under artificial lights.

POINSETTIA (Yoder). Dec. 20. Scarlet red, large daisy. Strong growth. Needs no disbudding. Attains the size of the Valencias on natural sprays. Responds uniformly, takes low temperatures well. A most important addition to the Christmas season.

PINK

COURTIER (Yoder). Oct. 10. Lavender pink decorative. Garden type, compact growth. Beautiful color and form. A Spellbound that is very frost-resistant. Good as an early pot plant.

LASSIE (Yoder). Oct. 10. Large, dark pink decorative, similar in size and form to Lavender Lady. A strong, upright habit well-suited to cutting. Holds well on the plant.

MISS CLARINDA (Holmes). Nov. 10. Light lavender shading darker toward center. Color and flower size resembles the variety, Mrs. Bulkeley, but production and growth is far superior.

PRICES above varieties except where noted: 50 cuttings for \$5.00; 100-250 cuttings, \$9.50 per 100; 300-450 cuttings, \$9.00 per 100; 500-950 cuttings, \$8.50 per 100; 1000-2450 cuttings, \$8.00 per 100; 2500 or more cuttings, \$7.50 per 100.

PINK—Continued

PANDORA (Yoder). Nov. 10. Large, luminous pink decorative. Excellent size and form. Growth is vigorous and fast, with short timing giving best results. Well suited to spring and cloth house flowering.

MEMORIAL (Yoder). Nov. 12. Intermediate pink Anemone. Excellent spray and growth. Improves the variety, Linda Lou, in substance, color and growth. Recommended April thru November. Holds color well. A pink Little America flower, with a much cleaner and more vigorous growth habit.

MERMAID (Yoder). Nov. 15. Intermediate pink Daisy. An excellent variety to follow Reward. Fine growth and production. Holds color well. Heavy petallage and good substance.

GRAND SLAM (Yoder). Nov. 20. Brilliant silvery pink

daisy. Large flower, wide, stiff petals. The variety responds well to shade. Growers will enthuse over its quality and production. Retailers will find in it the nearest color to a shell pink Aster yet found in the Chrysanthemum.

VIVACIOUS LADY (Helm). Nov. 20. Spoon type novelty. For growing in sprays as well as disbuds.

PRINCESS (Yoder). Nov. 25. Small pink pompon. Very lively color; hard, well rounded flower. Growth and production nearly identical to Snowflurry. Responds more uniformly than that variety.

HERITAGE (Yoder). Dec. 1. Large, formal dark pink pompon. Free, vigorous growth, good production. Improves the production of Minuet and responds more uniformly than Riviera or Minstrel.

PRICES above varieties except where noted: 50 cuttings for \$5.00; 100-250 cuttings, \$9.50 per 100; 300-450 cuttings, \$9.00 per 100; 500-950 cuttings, \$8.50 per 100; 1000-2450 cuttings, \$8.00 per 100; 2500 or more cuttings, \$7.50 per 100.

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INSTRUCTIONS FOR ORDERING

The minimum total order that can be accepted is 500 cuttings.

Fifty of each variety is the minimum that can be supplied.

More than 50 of a variety must be in multiples of 50.

Orders must be marked with a definite delivery date, such as May 10th, June 1st, etc. Orders marked "Early Delivery," "Deliver when ready," "Spring Delivery," are too indefinite.

In writing your order, please use special alphabetically arranged order blanks enclosed with this catalog.

SUBSTITUTIONS

We will substitute varieties as good or better for any items not listed in this catalog unless order is marked **No Substitutions**.

SHIPPING INFORMATION

Special shipping instructions and address if different from your regular mail address should be shown on your order.

All cuttings are shipped Railway Express, Air Freight or Air Express, collect. If you have any preference, designate on your order; otherwise our shippers will use their best judgment. Cuttings are in perfect condition when they are accepted by the transportation company. Therefore, if there is any damage enroute from being broken, heated or frozen, CALL YOUR EXPRESS or AIR FREIGHT AGENT to inspect the shipment upon arrival, marking on express receipt or bill of lading the condition of the package and amount of damage, etc. YOU MUST FILE CLAIMS, as our responsibility ceases when the carrier accepts shipment. We cannot be responsible for the safe arrival of your cuttings.

LIMITATION OF WARRANTY

We, Geo. J. Ball, Inc., warrant, to the extent of the purchase price, that seeds, plants or bulbs sold are as described on the container, within recognized tolerances. We give no other or further warranty, express or implied.

IMPORTANT: ABSOLUTELY NO CHANGES ON YOUR ORDER CAN BE ACCEPTED WITHIN 30 DAYS OF DELIVERY DATE.

Large Flowering Standards

Types are abbreviated as follows: Inc.—Incurved; Ref.—Reflexed. Size of flower is indicated by S—Small; M—Medium; L—Large. S—Indicates varieties we find most suitable for shading. P—Indicates varieties suitable for pot plants.

Pinching and flowering dates given here are for normal flowering without shading or lights.

Note carefully instructions for ordering on page 3. No orders for less than 50 rooted cuttings of a variety accepted. Minimum total order, 500 cuttings.

WHITE

Best whites for August, *Silver Sheen; September, *Betsy Ross; October, *Indianapolis White; November, Indianapolis White, Marketeer; Thanksgiving, Chattanooga; December, December Glory; Christmas, Smith's Late White.

Name and Description	Matures	50 per 50	100-250 per 100	300-450 per 100	500-950 per 100	1000-2450 per 100	2500 up per 100
8-Week Varieties							
S SILVER SHEEN. M. Inc. Pinch 7-8.....	10-20	\$2.75	\$5.20	\$4.95	\$4.65	\$4.40	\$4.10
WHITE CHIEF. Sport. M. Inc. Pinch 7-8.....	10-20	3.50	6.65	6.30	5.95	5.60	5.25
CHRISTINA. S. Inc. Pinch 7-14.....	10-23	3.50	6.65	6.30	5.95	5.60	5.25
9-Week Varieties							
P AMBASSADOR. Cream white. L. Inc. Pinch 7-14.....	10-25	3.00	5.70	5.40	5.10	4.80	4.50
P GRANITE STATE. Pure white. S. Inc. Pinch 7-12.....	10-25	2.75	5.20	4.95	4.65	4.40	4.10
ALBATROSS. Pure white, M. Inc. Pinch 7-14.....	11-1	3.00	5.70	5.40	5.10	4.80	4.50
SNOW WHITE. L. Inc. Pinch 7-14.....	11-1	2.75	5.20	4.95	4.65	4.40	4.10
WILSON'S WHITE (New). M. Inc. Pinch 7-16.....	11-1	5.00	9.50	9.00	8.50	8.00	7.50
10-Week Varieties							
S BETSY ROSS. Ivory white. L. Inc. Pinch 7-16.....	11-5	3.00	5.70	5.40	5.10	4.80	4.50
PS INDIANAPOLIS WHITE. M. Inc. Pinch 7-20.....	11-5	3.00	5.70	5.40	5.10	4.80	4.50
P RICHARD MANDEL. White. S. Inc. Pinch 7-19.....	11-5	3.00	5.70	5.40	5.10	4.80	4.50
JEAN ELIZABETH. L. Semi-Inc. Pinch 7-20.....	11-10	3.25	6.15	5.85	5.50	5.20	4.85
MONUMENT. Ivory white. L. Inc. Pinch 7-20.....	11-10	3.00	5.70	5.40	5.10	4.80	4.50
WHITE POCKETT. Exhibition type. Pinch 7-20.....	11-10	3.25	6.15	5.85	5.50	5.20	4.85
11-Week Varieties							
STERLING. White. L. Inc. Pinch 7-25.....	11-15	4.00	7.60	7.20	6.80	6.40	6.00
SP MARKETEER. M. Inc. Pinch 7-25.....	11-18	3.00	5.70	5.40	5.10	4.80	4.50
S MEFO. Ivory white. L. Inc. Pinch 7-24.....	11-20	3.00	5.70	5.40	5.10	4.80	4.50
P WHITE FRICK. White suffused pink. M. Inc. Pinch 7-24	11-20	3.00	5.70	5.40	5.10	4.80	4.50
12-Week Varieties							
CHATTANOOGA. L. Inc. Pinch 7-28.....	11-25	2.75	5.20	4.95	4.65	4.40	4.10
DECEMBER GLORY. Ivory white. M. Inc. Pinch 7-31. 12-1	3.00	5.70	5.40	5.10	4.80	4.50	
MARGARET MOELLER. White. L. Inc. Pinch 7-31. 12-3	3.00	5.70	5.40	5.10	4.80	4.50	
13-Week Varieties							
DECEMBER WHITE. M. Inc. Pinch 7-31.....	12-5	3.25	6.15	5.85	5.50	5.20	4.85
WHITE MISTLETOE. M. Inc. Pinch 7-31.....	12-5	3.25	6.15	5.85	5.50	5.20	4.85
SNOWLINE. Showy white flower. L. Inc. Pinch 8-1. 12-10	4.50	8.55	8.10	7.65	7.20	6.75	
SMITH'S LATE WHITE. Ivory white. M. Inc. Pinch 8-4	12-15	3.25	6.15	5.85	5.50	5.20	4.85

YELLOW

Best yellows for August, *Good News; September, *Good News; October, *Indianapolis Yellow; November, Indianapolis Yellow, Yellow Mefo; Thanksgiving, Yellow Chattanooga; December, Golden Mrs. Ross; Christmas, Tobin's Yellow.

Name and Description	Matures	50 per 50	100-250 per 100	300-450 per 100	500-950 per 100	1000-2450 per 100	2500 up per 100
8-Week Varieties							
P HARVEST GOLDEN. Deep gold. M. Inc. Pinch 7-10. 10-10	\$4.00	\$7.60	\$7.20	\$6.80	\$6.40	\$6.00	
P CELESTRA. Lemon yellow. S. Inc. Pinch 7-8.....	10-15	3.00	5.70	5.40	5.10	4.80	4.50
P GOLD LODE. Golden yellow. M. Ref. Pinch 7-8.....	10-15	2.75	5.20	4.95	4.65	4.40	4.10
YELLOW CHIEF. Sport. M. Ref. Pinch 7-8.....	10-15	2.75	5.20	4.95	4.65	4.40	4.10
BUTTERBALL. M. Inc. Pinch 7-8.....	10-20	3.50	6.65	6.30	5.95	5.60	5.25
P MRS. KIDDER. Deep lemon yellow. M. Inc. Pinch 7-8. 10-20	2.50	4.75	4.50	4.25	4.00	3.75	
SP BLAZING GOLD. Deep gold. M. Inc. Pinch 7-14... 10-23	3.00	5.70	5.40	5.10	4.80	4.50	

*Starred varieties must be shaded to flower at this time.

Large Flowering Standards

YELLOW—Continued

Name and Description	Matures	50 per 50	100-250 per 100	300-450 per 100	500-950 per 100	1000-2450 per 100	2500 up per 100
9-Week Varieties							
SMITH'S SUPERLATIVE. Golden yellow. M. Inc.							
Pinch 7-14	10-25	\$3.25	\$6.15	\$5.85	\$5.50	\$5.20	\$4.85
SUNGLOW. Golden yellow. L. Inc. Pinch 7-14 . . .	10-25	2.50	4.75	4.50	4.25	4.00	3.75
P YELLOW AMBASSADOR. Light lemon yellow. L. Inc. Pinch 7-14	10-25	3.00	5.70	5.40	5.10	4.80	4.50
YELLOW BERGEN. Med. Inc. Pinch 7-14	10-25	3.25	6.15	5.85	5.50	5.20	4.85
GOLDEN GLORY. Golden yellow. M. Inc. Pinch 7-14 . . .	11-1	3.25	6.15	5.85	5.50	5.20	4.85
S GOOD NEWS. Deep lemon yellow. M. Inc. Pinch 7-14 . . .	11-1	3.25	6.15	5.85	5.50	5.20	4.85
10-Week Varieties							
P DARK INDIANAPOLIS YELLOW. For pot plant use only. Pinch 7-19	11-5	3.50	6.65	6.30	5.95	5.60	5.25
S INDIANAPOLIS YELLOW. Lemon yellow. M. Inc.							
Pinch 7-20	11-5	3.00	5.70	5.40	5.10	4.80	4.50
SCHWEIZERLAND. Deep golden. M. Inc. Pinch 7-20 . . .	11-5	4.00	7.60	7.20	6.80	6.40	6.00
S JAMBOREE. Golden yellow. M. Inc. Pinch 7-19 . . .	11-10	4.50	8.55	8.10	7.65	7.20	6.75
P YELLOW BEAUTY. Golden yellow. S. Inc. Pinch 7-19 . . .	11-10	3.25	6.15	5.85	5.50	5.20	4.85
YELLOW MONUMENT. Light lemon yellow. L. Inc.							
Pinch 7-22	11-10	3.00	5.70	5.40	5.10	4.80	4.50
YELLOW POCKETT. Exhibition variety. L. Inc.							
Pinch 7-19	11-10	3.25	6.15	5.85	5.50	5.20	4.85
S YELLOW QUEEN. Sport of Orchid Queen. L. Inc.							
Pinch 7-19	11-10	3.25	6.15	5.85	5.50	5.20	4.85
HONEY DEW. Lemon yellow. Int. Inc. Pinch 7-22 . . .	11-12	3.25	6.15	5.85	5.50	5.20	4.85
11-Week Varieties							
P BONAFFON DELUXE. Golden yellow. S. Inc. Pinch 7-25	11-20	2.50	4.75	4.50	4.25	4.00	3.75
P FRIENDLY RIVAL. Deep chrome yellow. M. Inc.							
Pinch 7-25	11-20	3.00	5.70	5.40	5.10	4.80	4.50
PURDUE. Lemon yellow. M. Inc. Pinch 7-25	11-20	4.00	7.60	7.20	6.80	6.40	6.00
S YELLOW MEFO. Lemon yellow. L. Inc. Pinch 7-25 . . .	11-20	3.00	5.70	5.40	5.10	4.80	4.50
HARVESTER. Deep canary yellow. M. Inc. Pinch 7-24 . . .	11-23	3.00	5.70	5.40	5.10	4.80	4.50
MARIE DEPETRIS. Deep golden yellow. M. Inc.							
Pinch 7-24	11-23	3.00	5.70	5.40	5.10	4.80	4.50
12-Week Varieties							
S GOLDEN PEARSON. Light golden yellow. M. Inc.							
Pinch 7-28	11-25	2.75	5.20	4.95	4.65	4.40	4.10
P SUN GOLD. Lemon yellow. M. Inc. Pinch 7-28 . . .	11-25	3.00	5.70	5.40	5.10	4.80	4.50
YELLOW CHATTANOOGA. L. Inc. Pinch 7-28 . . .	11-25	2.75	5.20	4.95	4.65	4.40	4.10
GOLDEN MRS. ROSS. Golden yellow. L. Inc. Pinch 7-30 . . .	12-3	2.75	5.20	4.95	4.65	4.40	4.10
YELLOW MOELLER. Sport of Margaret Moeller.							
Pinch 7-31	12-3	3.50	6.65	6.30	5.95	5.60	5.25
13-Week Varieties							
CHALICE (New). Int. Inc. Pinch 8-1	12-10	5.00	9.50	9.00	8.50	8.00	7.50
GOLDEN MISTLETOE. Light golden yellow. M. Inc.							
Pinch 8-1	12-10	3.25	6.15	5.85	5.50	5.20	4.85
DAUNTLESS. Golden yellow. Semi-Inc. Pinch 8-4 . . .	12-15	3.50	6.65	6.30	5.95	5.60	5.25
METEORE. Lemon yellow. M. Inc. Pinch 8-4	12-15	3.25	6.15	5.85	5.50	5.20	4.85
TOBIN'S YELLOW. M. Inc. Pinch 8-4	12-15	3.25	6.15	5.85	5.50	5.20	4.85

IMPORTANT: ABSOLUTELY NO CHANGES ON YOUR ORDER CAN BE ACCEPTED WITHIN 30 DAYS OF DELIVERY DATE.

Large Flowering Standards

Types are abbreviated as follows: Inc.—Incurved; Ref.—Reflexed. Size of flower is indicated by S—Small; M—Medium; L—Large. S—Indicates varieties we find most suitable for shading. P—Indicates varieties suitable for pot plants. Pinching and flowering dates given here are for normal flowering without shading or lights.

Note carefully instructions for ordering on page 3. No orders for less than 50 rooted cuttings of a variety accepted. Minimum total order, 500 cuttings.

BRONZE AND RED

Best bronze and reds for August, *Detroit News; September, *Detroit News; October, *Indianapolis Bronze; November, Indianapolis Bronze, Mrs. Roy; Thanksgiving, Gladys Pearson; December, Bronze Mistletoe.

Name and Description	Matures	50 per 50	100-250 per 100	300-450 per 100	500-950 per 100	1000-2450 per 100	2500 up per 100
8-Week Varieties							
P AMBER BRIGHT. Amber bronze. L. Inc. Pinch 7-15. 10-8		\$4.00	\$7.60	\$7.20	\$6.80	\$6.40	\$6.00
9-Week Varieties							
HILDA BERGEN. Dark reddish bronze. M. Inc.							
Pinch 7-14	10-25	3.25	6.15	5.85	5.50	5.20	4.85
GLITTERS. Deep reddish orange. M. Ref. Pinch 7-16. 10-28		3.25	6.15	5.85	5.50	5.20	4.85
S APRICOT QUEEN. Orange-bronze. M. Inc. Pinch 7-16. 11-1		3.25	6.15	5.85	5.50	5.20	4.85
IVANHOE. Reddish bronze. S. Inc. Pinch 7-16.....	11-1	3.25	6.15	5.85	5.50	5.20	4.85
MOLLIE NICHOLSON. Salmon bronze. M. Inc.							
Pinch 7-20	11-1	4.00	7.60	7.20	6.80	6.40	6.00
S DETROIT NEWS. Reddish bronze. M. Inc. Pinch 7-16. 11-1		3.25	6.15	5.85	5.50	5.20	4.85
10-Week Varieties							
PS INDIANAPOLIS BRONZE. Buff bronze. M. Inc.							
Pinch 7-20	11-5	3.00	5.70	5.40	5.10	4.80	4.50
P INDIANAPOLIS GOLDEN BRONZE (New). Quilled.							
For pot plant use only. Pinch 7-19.....	11-5	5.00	9.50	9.00	8.50	8.00	7.50
ANACONDA. Deep coppery red. L. Inc. Pinch 7-20. 11-8		2.75	5.20	4.95	4.65	4.40	4.10
S BRONZE ORCHID QUEEN. Apricot buff. L. Inc.							
Pinch 7-20	11-10	3.25	6.15	5.85	5.50	5.20	4.85
MRS. STAHELIN. Reddish bronze. M. Inc. Pinch 7-20. 11-10		3.50	6.65	6.30	5.95	5.60	5.25
OAKDALE. Buff bronze. M. Inc. Pinch 7-20.....	11-10	4.50	8.55	8.10	7.65	7.20	6.75
GARNET KING. Dark red. M. Ref. Pinch 7-24.....	11-13	3.25	6.15	5.85	5.50	5.20	4.85
S MRS. ROY. Red. M. Inc. Pinch 7-20.....	11-13	3.25	6.15	5.85	5.50	5.20	4.85
12-Week Varieties							
P BRONZE FRICK. Light bronze. M. Inc. Pinch 7-28. 11-25		3.00	5.70	5.40	5.10	4.80	4.50
S GLADYS PEARSON. Light buff bronze. M. Inc.							
Pinch 7-28	11-25	2.75	5.20	4.95	4.65	4.40	4.10
S OAK LEAF (Bronze Pearson). M. Inc. Pinch 7-28....	11-25	2.75	5.20	4.95	4.65	4.40	4.10
MUTO'S CRIMSON. Red. M. Semi-Inc. Pinch 7-28..	12-1	4.00	7.60	7.20	6.80	6.40	6.00
13-Week Varieties							
BRONZE MISTLETOE. Buff bronze. M. Inc. Pinch							
7-28	12-5	3.25	6.15	5.85	5.50	5.20	4.85

PINK

Best pinks for September, Indianapolis Pink; October, *Orchid Queen; November, Orchid Queen; Thanksgiving, Helen Frick.

Name and Description	Matures	50 per 50	100-250 per 100	300-450 per 100	500-950 per 100	1000-2450 per 100	2500 up per 100
8-Week Varieties							
PINK CHIEF. Lavender. M. Inc. Pinch 7-8.....	10-15	\$2.75	\$5.20	\$4.95	\$4.65	\$4.40	\$4.10
MAJOR BOWES. Deep lavender. M. Inc. Pinch 7-12. 10-20		3.00	5.70	5.40	5.10	4.80	4.50
9-Week Varieties							
SUGAR PLUM. Hard pink Mum. M. Inc. Pinch 7-14. 11-1		4.50	8.55	8.10	7.65	7.20	6.75
10-Week Varieties							

*Starred varieties must be shaded to flower at this time.

Large Flowering Standards

PINK—Continued

Name and Description	Matures	50 per 50	100-250 per 100	300-450 per 100	500-950 per 100	1000-2450 per 100	2500 up per 100
SP INDIANAPOLIS PINK. Deep lavender. M. Inc. Pinch 7-20.....	11-5	\$3.00	\$5.70	\$5.40	\$5.10	\$4.80	\$4.50
S DARK ORCHID QUEEN. Deep pink. L. Inc. Pinch 7-20.....	11-10	3.25	6.15	5.85	5.50	5.20	4.85
S ORCHID QUEEN. Orchid pink. M. Inc. Pinch 7-20.....	11-10	3.25	6.15	5.85	5.50	5.20	4.85
P PINK POCKETT. Lavender. L. Inc. Pinch 7-19.....	11-10	3.25	6.15	5.85	5.50	5.20	4.85
P QUEEN OF PINKS. Lavender S. Inc. Pinch 7-19.....	11-10	2.75	5.20	4.95	4.65	4.40	4.10

11-Week Varieties

ARISTOCRAT. Deep lavender. L. Inc. Pinch 7-22.....	11-20	3.25	6.15	5.85	5.50	5.20	4.85
P HELEN FRICK. Rose pink. M. Inc. Pinch 7-28.....	11-20	3.00	5.70	5.40	5.10	4.80	4.50
EDWIN SEIDEWITZ. Lavender. M. Inc. Pinch 7-28.....	11-23	3.00	5.70	5.40	5.10	4.80	4.50
P THANKSGIVING PINK. Deep pink. M. Ref. Pinch 7-24.....	11-23	3.00	5.70	5.40	5.10	4.80	4.50

12-Week Varieties

ROSE DELIGHT. Deep rose. M. Inc. Pinch 7-28.....	11-25	4.00	7.60	7.20	6.80	6.40	6.00
PINK MISTLETOE. Lavender. M. Inc. Pinch 8-1.....	12-5	3.25	6.15	5.85	5.50	5.20	4.85

Spider Varieties

Name and Description	Matures	50 per 50	100-250 per 100	300-450 per 100	500-950 per 100	1000-2450 per 100	2500 up per 100
9-Week Varieties							
KAY TASHIMA. White. Pinch 7-15.....	10-25	\$3.50	\$6.65	\$6.30	\$5.95	\$5.60	\$5.25
MARY GARDEN. Pink. Pinch 7-14.....	11-1	4.50	8.55	8.10	7.65	7.20	6.75
MRS. R. A. WALKER. Deep lavender. Pinch 7-14.....	11-1	3.50	6.65	6.30	5.95	5.60	5.25
P QUEEN'S LACE. White. Pinch 7-14.....	11-1	4.00	7.60	7.20	6.80	6.40	6.00
YELLOW LACE. Yellow sport of Queen's Lace. Pinch 7-14.....	11-1	4.00	7.60	7.20	6.80	6.40	6.00

10-Week Varieties

GENE HARWOOD. Buff bronze. Pinch 7-19.....	11-5	3.50	6.65	6.30	5.95	5.60	5.25
MAMORU. Buff bronze. Pinch 7-19.....	11-5	3.00	5.70	5.40	5.10	4.80	4.50
NOMAGO (New). Bronze. Pinch 7-19.....	11-5	5.00	9.50	9.00	8.50	8.00	7.50
RAYONNANTE. Pink. Pinch 7-19.....	11-5	3.25	6.15	5.85	5.50	5.20	4.85
SUE SALLY JONES. Deep lemon yellow. Pinch 7-19.	11-5	3.50	6.65	6.30	5.95	5.60	5.25
WAIKIKI. Apricot bronze. Pinch 7-19.....	11-5	3.50	6.65	6.30	5.95	5.60	5.25
WHITE RAYONNANTE. White. Pinch 7-19.....	11-5	3.25	6.15	5.85	5.50	5.20	4.85
P PEGGY ANN HOOVER. Pink. Pinch 7-20.....	11-10	3.50	6.65	6.30	5.95	5.60	5.25

11-Week Varieties

LORRAINE. Yellow. Pinch 7-24.....	11-15	4.00	7.60	7.20	6.80	6.40	6.00
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QUEEN'S LACE

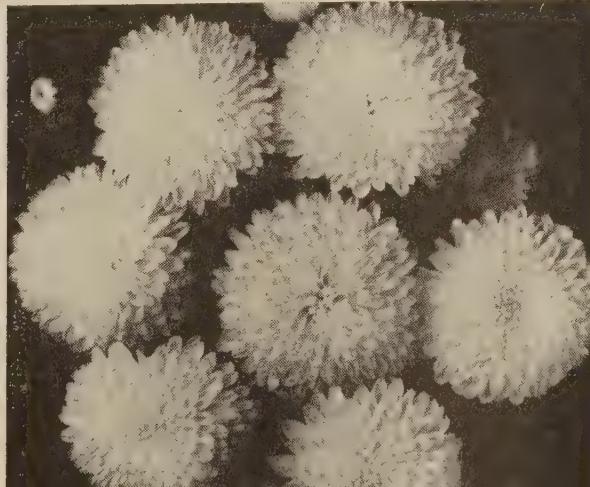
These lace varieties are surprisingly good shippers.

SONGSTER

Excellent, productive white during hot summer and early fall months.

ENCORE

Good producing pure white for late summer and fall.



Pompons, Singles and Anemones

Types are abbreviated as follows. Pom.—Pompon; Dec.—Decorative; Sgl.—Single; Anem.—Anemone. Size of flower is indicated by S—Small; M—Medium; L—Large.

S—Indicates varieties we find most suitable for shading. D—Indicates varieties suitable to grow as disbudded Pompons.
P—Indicates varieties suitable for pot plants.

Pinching and flowering dates given here are for normal flowering without shading or lights.

Note carefully instructions for ordering on page 3. No orders for less than 50 rooted cuttings of a variety accepted. Minimum total order, 500 cuttings.

WHITE

Best white for August, *Pinocchio; September, *Pinocchio; October, *Little America, Pinocchio; November, Sea Gull, Little America; Thanksgiving, Priscilla; December, Cameo; Christmas, Snow.

Name and Description	Matures	50 per 50	100-250 per 100	300-450 per 100	500-950 per 100	1000-2450 per 100	2500 up per 100
7-Week Varieties							
LYRIC (New). M. Pom.	10-5	\$5.00	\$9.50	\$9.00	\$8.50	\$8.00	\$7.50
HORIZON (New). Pure white. M. Pom. Pinch	10-5	5.00	9.50	9.00	8.50	8.00	7.50
CLASSIC. S. semi-formal Pom. Pinch 7-5	10-10	4.50	8.55	8.10	7.65	7.20	6.75
P MAESTRO. Med. Pom. Dwarf, compact 18-inch growth. Pinch 7-4	10-10	4.50	8.55	8.10	7.65	7.20	6.75
RENNOWN. White daisy. Pinch 7-4	10-10	4.50	8.55	8.10	7.65	7.20	6.75
SILVERPLATE. M. Dec. Pinch 7-8	10-12	4.50	8.55	8.10	7.65	7.20	6.75
8-Week Varieties							
S IRENE. S. Pom. Pinch 7-10	10-15	2.75	5.20	4.95	4.65	4.40	4.10
NORONA (New). S. Pom. Pinch 7-10	10-15	5.00	9.50	9.00	8.50	8.00	7.50
SD SILVER BALL. L. Pom. Pinch 7-10	10-15	2.50	4.75	4.50	4.25	4.00	3.75
S MINONG. S. Pom. Pinch 7-8	10-20	2.50	4.75	4.50	4.25	4.00	3.75
S PRISTINE. Pure white. M. Pom. Pinch 7-8	10-20	4.00	7.60	7.20	6.80	6.40	6.00
SNOW CLOUD. White. M. Pom. Pinch 7-10	10-20	3.00	5.70	5.40	5.10	4.80	4.50
9-Week Varieties							
S COTTON TOP. Pure white. Pinch 7-14	10-25	3.00	5.70	5.40	5.10	4.80	4.50
CREAM DOT. Cream, apricot center. M. Pom. Pinch 7-15	10-25	2.75	5.20	4.95	4.65	4.40	4.10
KEEPSAKE (New). Cream white. M. Pom.	10-25	5.00	9.50	9.00	8.50	8.00	7.50
S PINOCCHIO. S. Pom. Pinch 7-15	10-25	2.75	5.20	4.95	4.65	4.40	4.10
S POPCORN. White. M. Pom. Pinch 7-14	10-25	4.00	7.60	7.20	6.80	6.40	6.00
S SONGSTER. M. Pom. Pinch 7-14	10-25	4.50	8.55	8.10	7.65	7.20	6.75
WHITE POPCORN (New). Cream white sport of Popcorn. Pinch 7-14	10-25	5.00	9.50	9.00	8.50	8.00	7.50
S ARCADIA. M. Pom. Pinch 7-14	10-28	2.75	5.20	4.95	4.65	4.40	4.10
CALIFORNIA WHITE DAISY. Sport. Pinch 7-14	11-1	3.00	5.70	5.40	5.10	4.80	4.50
S HALO. Early white daisy. Pinch 7-14	11-1	4.50	8.55	8.10	7.65	7.20	6.75
S SEA GULL. Cream white. M. Pom. Pinch 7-14	11-1	2.75	5.20	4.95	4.65	4.40	4.10
SD WHITE DOTY. Ivory white. L. Pom. Pinch 7-14	11-1	2.75	5.20	4.95	4.65	4.40	4.10
10-Week Varieties							
S ENCORE. Pure white. M. Pom. Pinch 7-19	11-5	4.00	7.60	7.20	6.80	6.40	6.00
S KOLOWA. White, yellow center. M. Sgl. Pinch 7-19	11-5	4.50	8.55	8.10	7.65	7.20	6.75
MADONNA (New). M. Pom. Pinch 7-19	11-5	5.00	9.50	9.00	8.50	8.00	7.50
D WHITE ANEMONE. M. Anem. Pinch 7-19	11-5	3.25	6.15	5.85	5.50	5.20	4.85
S WHITE MENSA. Ivory white. M. Sgl. Pinch 7-20	11-5	3.00	5.70	5.40	5.10	4.80	4.50
S MOONGLOW. White. M. Pom. Pinch 7-20	11-8	4.00	7.60	7.20	6.80	6.40	6.00
S REV. BUSHNELL. Cream white. M. Pom. Pinch 7-20	11-8	3.25	6.15	5.85	5.50	5.20	4.85
DYNAMO (New). M. Pom. Pinch 7-20	11-10	5.00	9.50	9.00	8.50	8.00	7.50
SP LITTLE AMERICA. M. Anem. Pinch 7-20	11-10	2.50	4.75	4.50	4.25	4.00	3.75
S SHASTA. M. Anem. Pinch 7-22	11-10	2.75	5.20	4.95	4.65	4.40	4.10
SHASTA DAISY. M. Sgl. Sport of Shasta. Pinch 7-22	11-10	2.75	5.20	4.95	4.65	4.40	4.10
VESPER. M. Pom. Pinch 7-20	11-10	2.75	5.20	4.95	4.65	4.40	4.10
ILLINI SNOWDRIFT. White. Dec. Pinch 7-22	11-12	4.00	7.60	7.20	6.80	6.40	6.00
MATCHLESS. White. M. Pom. Pinch 7-22	11-12	3.00	5.70	5.40	5.10	4.80	4.50

*Starred varieties must be shaded to flower at this time.

MINIMUM ORDER 500 CUTTINGS, MINIMUM QUANTITY FURNISHED OF
ANY ONE VARIETY, 50 CUTTINGS.

Pompons, Singles and Anemones

WHITE—Continued

Name and Description	Matures	50 per 50	100-250 per 100	300-450 per 100	500-950 per 100	1000-2450 per 100	2500 up per 100
11-Week Varieties							
ESKIMO (New). M. Sgl. Pinch 7-22.....	11-15	\$5.00	\$9.50	\$9.00	\$8.50	\$8.00	\$7.50
LAKME. Green eye. S. Pom. Pinch 7-8.....	11-15	3.50	6.65	6.30	5.95	5.60	5.25
SCULPTURE (New). Ivory white. L. Sgl. Pinch 7-22.....	11-15	5.00	9.50	9.00	8.50	8.00	7.50
S SNOWFLURRY. S. Pom. Pinch 7-22.....	11-15	4.50	8.55	8.10	7.65	7.20	6.75
SD WHITE FREIDA. Yellow cushion. L. Anem. Pinch 7-22	11-15	3.00	5.70	5.40	5.10	4.80	4.50
D WHITE NORMA. White suffused with pink. L. Anem. Pinch 7-22	11-15	3.25	6.15	5.85	5.50	5.20	4.85
HIGHBROW. Ivory white. Dec. Pinch 7-24.....	11-20	4.50	8.55	8.10	7.65	7.20	6.75
SD LONG ISLAND BEAUTY. White, yellow cushion. L. Anem. Pinch 7-24.....	11-20	2.50	4.75	4.50	4.25	4.00	3.75
D NEVADA. White, green cushion. M. Anem. Pinch 7-24	11-20	3.00	5.70	5.40	5.10	4.80	4.50
PRISCILLA. M. Pom. Pinch 7-24.....	11-20	3.00	5.70	5.40	5.10	4.80	4.50
SEAFOAM. M. Pom. Pinch 7-24.....	11-20	2.75	5.20	4.95	4.65	4.40	4.10
CRYSTAL BEAUTY. Pure white. Pom. Pinch 7-28.....	11-23	4.00	7.60	7.20	6.80	6.40	6.00
ILLINI BOUNTIFUL. White. Dec. Pinch 7-28.....	11-23	4.00	7.60	7.20	6.80	6.40	6.00
S PARAMOUNT. M. Pom. Pinch 7-28.....	11-23	4.50	8.55	8.10	7.65	7.20	6.75
12-Week Varieties							
WHITE USONA. M. Pom. Pinch 7-28.....	11-25	3.50	6.65	6.30	5.95	5.60	5.25
WHITE YULETIDE. Short. M. Pom. Pinch 7-28.....	11-25	2.75	5.20	4.95	4.65	4.40	4.10
D WHITE VALENCIA. Sport of Valencia. Pinch 7-28.....	11-28	4.00	7.60	7.20	6.80	6.40	6.00
BELRAY. L. Pom. Pinch 7-28.....	11-30	4.50	8.55	8.10	7.65	7.20	6.75
CORDOVA. Cream white. M. Dec. Pinch 7-28.....	11-30	2.75	5.20	4.95	4.65	4.40	4.10
S FORTUNE. White. Pom. Pinch 8-2.....	12-1	4.50	8.55	8.10	7.65	7.20	6.75
MONARCH (New). Ivory white. L. Dec. Pinch 8-2.....	12-1	5.00	9.50	9.00	8.50	8.00	7.50
13-Week Varieties							
ACCLAIM (New). Large formal Pom. Pinch 7-31.....	12-5	5.00	9.50	9.00	8.50	8.00	7.50
CAMEO. Ivory white. Med. Pom. Pinch 8-1.....	12-5	3.00	5.70	5.40	5.10	4.80	4.50
COTILLION (New). M. Semi-formal Pom. Pinch 8-1.....	12-5	5.00	9.50	9.00	8.50	8.00	7.50
IVORY CAMEO. Cream sport of Cameo. Pinch 8-1.....	12-5	3.50	6.65	6.30	5.95	5.60	5.25
SPANGLES. S. Pom. Pinch 8-1.....	12-5	4.50	8.55	8.10	7.65	7.20	6.75
SWAN. L. Anem. Pinch 8-1.....	12-5	3.50	6.65	6.30	5.95	5.60	5.25
SNOWDROP (New). S. Pom. Pinch 8-1.....	12-8	5.00	9.50	9.00	8.50	8.00	7.50
ILLINI STARBURST. Creamy white, quilled type. Pinch 8-1	12-10	4.50	8.55	8.10	7.65	7.20	6.75
SNOW QUEEN (New). M. Formal Pom. Pinch 8-1.....	12-10	5.00	9.50	9.00	8.50	8.00	7.50
D WHITE SUPREME. L. Anem. Pinch 8-2.....	12-10	3.25	6.15	5.85	5.50	5.20	4.85
YUKON. M. Sgl. Pinch 8-1.....	12-10	2.75	5.20	4.95	4.65	4.40	4.10

ILLINI SNOWDRIFT

The popular pure white spider Pomp. Over a bunch per sq. ft. Handles and ships remarkably well.

**SHASTA**

Both this and its yellow sport are excellent "bread and butter" varieties thruout the year.

**STARBRIGHT**

Golden yellow single.



Pompons, Singles and Anemones

WHITE—Continued

Name and Description	Matures	50 per 50	100-250 per 100	300-450 per 100	500-950 per 100	1000-2450 per 100	2500 up per 100
14-Week Varieties							
SNOWCREST. White. M. Dec. Pinch 8-1.....	12-12	\$4.00	\$7.60	\$7.20	\$6.80	\$6.40	\$6.00
GARZA. M. Anem. Pinch 8-4.....	12-15	3.00	5.70	5.40	5.10	4.80	4.50
SATELLITE (New). Ivory white. M. Formal Pom. Pinch 8-4	12-15	5.00	9.50	9.00	8.50	8.00	7.50
SILVERSMITH. Pure white. Dec. Pinch 8-4.....	12-15	4.00	7.60	7.20	6.80	6.40	6.00
SNOWCAP. White. M. Pom. Pinch 8-4.....	12-15	4.00	7.60	7.20	6.80	6.40	6.00
HEIRLOOM. Dec. Pom. Pinch 8-7.....	12-20	4.50	8.55	8.10	7.65	7.20	6.75
REVELATION. M. Pom. Pinch 8-7.....	12-25	2.50	4.75	4.50	4.25	4.00	3.75
SNOW. Ivory white. M. Pom. Pinch 8-7.....	12-25	2.75	5.20	4.95	4.65	4.40	4.10

YELLOW

Best yellows for August, *Gold Coast; September, *Gold Coast; October, *Mary Hall, Gold Coast; November, Constellation, Yellow Fellow; Thanksgiving, Goldsmith; December, Yellow Cameo; Christmas, Yellow Snow.

Name and Description	Matures	50 per 50	100-250 per 100	300-450 per 100	500-950 per 100	1000-2450 per 100	2500 up per 100
7-Week Varieties							
GARLAND (New). Int. Sgl.....	10-5	\$5.00	\$9.50	\$9.00	\$8.50	\$8.00	\$7.50
BRIGHT FORECAST. Small formal pompon. Pinch 7-5.	10-10	4.50	8.55	8.10	7.65	7.20	6.75
GOLDRUSH. Small Sgl. Pinch 7-5.....	10-10	4.50	8.55	8.10	7.65	7.20	6.75
TREASURE (New). S. Pom. Pinch 7-5.....	10-10	5.00	9.50	9.00	8.50	8.00	7.50
LEMONADE. Ivory yellow. Int. Dec. Pinch 7-8.....	10-12	4.50	8.55	8.10	7.65	7.20	6.75
SWEEPSTAKE. S. Pom. Pinch 7-8.....	10-12	4.50	8.55	8.10	7.65	7.20	6.75
8-Week Varieties							
S YELLOW IRENE. Light lemon yellow. S. Pom. Pinch 7-8.	10-15	2.75	5.20	4.95	4.65	4.40	4.10
S RODELL IMPROVED. Lemon yellow. M. Pom. Pinch 7-8.	10-20	2.50	4.75	4.50	4.25	4.00	3.75
9-Week Varieties							
S GOLD COAST. Lemon yellow. M. Pom. Pinch 7-14. 10-25	2.50	4.75	4.50	4.25	4.00	3.75	
S GOLDEN HERALD. Golden yellow. L. Dec. Pinch 7-14.	10-25	3.00	5.70	5.40	5.10	4.80	4.50
SUNUP (New). S. Pom. Pinch 7-14.....	10-25	5.00	9.50	9.00	8.50	8.00	7.50
S YELLOW DOT. Bronze center. M. Pom. Pinch 7-14. 10-25	2.75	5.20	4.95	4.65	4.40	4.10	
S YELLOW FIREBIRD. Bright lemon. M. Dec. Pinch 7-14.	10-25	3.25	6.15	5.85	5.50	5.20	4.85
YELLOW ARCADIA. Pernet yellow. M. Pom. Pinch 7-14.	10-28	2.75	5.20	4.95	4.65	4.40	4.10

*Starred varieties must be shaded to flower at this time.

ILLINI HONEY

Deep bronzy yellow. Small, hard flower.

GOLDEN CHORD

Two excellent deep golden yellow Poms for October and November.

FORTY NINER





CINDERELLA

Nice yellow single flowering naturally early December.

RED DOT

An attractive addition to the Dot family—yellow-bronze with red center. Place somewhat closer than normal for maximum production.

CHAMPAGNE

A fine yellow single for Thanksgiving.

Pompons, Singles and Anemones

YELLOW—Continued

	Name and Description	Matures	50 per 50	100-250 per 100	300-450 per 100	500-950 per 100	1000-2450 per 100	2500 up per 100
S	MARY L. HALL. Lemon yellow. M. Pom. Pinch 7-14.	11-1	\$2.50	\$4.75	\$4.50	\$4.25	\$4.00	\$3.75
S	SCHNEEBURG'S DAISY. Golden yellow sport of Yellow Daisy. M. Sgl. Pinch 7-15.....	11-1	4.00	7.60	7.20	6.80	6.40	6.00
S	STARBRIGHT. Golden yellow. L. Sgl. Pinch 7-14.	11-1	4.00	7.60	7.20	6.80	6.40	6.00
	YELLOW CASSANDRA. Sport. Pinch 7-20.....	11-1	4.00	7.60	7.20	6.80	6.40	6.00
S	YELLOW DAISY. Golden yellow. M. Sgl. Pinch 7-14.	11-1	3.00	5.70	5.40	5.10	4.80	4.50
D	YELLOW DOTY. Buff yellow. M. L. Pom. Pinch 7-14.	11-1	2.75	5.20	4.95	4.65	4.40	4.10
	YELLOW SEA GULL. Light lemon yellow. Tall. M. Pom. Pinch 7-14.....	11-1	2.75	5.20	4.95	4.65	4.40	4.10
	SUNRAY. Light lemon yellow. M. Anem. Pinch 7-14.	11-3	2.50	4.75	4.50	4.25	4.00	3.75

10-Week Varieties

BRIGADOON (New).	M. Sgl. Pinch 7-20.....	11-5	5.00	9.50	9.00	8.50	8.00	7.50
BARCAROLE.	Golden yellow. M. Pom. Pinch 7-20.	11-5	2.75	5.20	4.95	4.65	4.40	4.10
CONSTELLATION.	Yellow. M. Dec. Pinch 7-20....	11-5	3.00	5.70	5.40	5.10	4.80	4.50
S	CRESCENDO. Tall yellow. L. Pom. Pinch 7-20.....	11-5	4.50	8.55	8.10	7.65	7.20	6.75
S	GOLDEN MENSA. Sport of Mensa. Pinch 7-20.....	11-5	3.00	5.70	5.40	5.10	4.80	4.50
S	NUGGETS. Light lemon yellow. S. Pom. Pinch 7-20.	11-5	2.50	4.75	4.50	4.25	4.00	3.75
	PIXIE. Deep golden yellow. S. Pom. Pinch 7-20.....	11-10	3.25	6.15	5.85	5.50	5.20	4.85
	MASON'S YELLOW. L. Sgl. Pinch 7-20.....	11-10	3.25	6.15	5.85	5.50	5.20	4.85
S	YELLOW SHASTA. Sport of Shasta. Pinch 7-20.....	11-10	2.75	5.20	4.95	4.65	4.40	4.10
	ILLINI GOLDCUP. Buttercup yellow. L. Pom. Pinch 7-20.	11-10	4.50	8.55	8.10	7.65	7.20	6.75
	ILLINI RYE (New). Straw-colored. M. Pom. Pinch 7-19.	11-12	5.00	9.50	9.00	8.50	8.00	7.50

11-Week Varieties

S	FORTY-NINER. Round, yellow Pom. Pinch 7-24....	11-15	4.00	7.60	7.20	6.80	6.40	6.00
S	GOLDEN CHORD. Golden yellow. M. Pom. Pinch 7-24	11-15	4.00	7.60	7.20	6.80	6.40	6.00
	PRINCETON. Orange-yellow. M. Dec. Pinch 7-24...	11-15	3.25	6.15	5.85	5.50	5.20	4.85
	TALLY-HO. M. Formal Pom. Pinch 7-24.....	11-15	3.50	6.65	6.30	5.95	5.60	5.25
	THOROBRED (New). L. Sgl. Pinch 7-24.....	11-15	5.00	9.50	9.00	8.50	8.00	7.50
	YELLOW FELLOW. Deep lemon yellow. M. Dec. Pinch 7-24.	11-15	2.75	5.20	4.95	4.65	4.40	4.10
	ILLINI BRAVE. Lemon yellow. Button Pom. Pinch 7-22.	11-16	4.00	7.60	7.20	6.80	6.40	6.00
D	SUSANNE MILLER. Buff yellow. L. Anem. Pinch 7-22.	11-18	3.25	6.15	5.85	5.50	5.20	4.85
	ILLINI HONEY. Deep golden. S. Pom. Pinch 7-28..	11-18	4.00	7.60	7.20	6.80	6.40	6.00

Pompons, Singles and Anemones

Types are abbreviated as follows. Pom.—Pompon; Dec.—Decorative; Sgl.—Single; Anem.—Anemone. Size of flower is indicated by S—Small; M—Medium; L—Large.

S—Indicates varieties we find most suitable for shading. D—Indicates varieties suitable to grow as disbudded Pompons.
P—Indicates varieties suitable for pot plants.

Pinching and flowering dates given here are for normal flowering without shading or lights.

Note carefully instructions for ordering on page 3. No orders for less than 50 rooted cuttings of a variety accepted. Minimum total order, 500 cuttings.

YELLOW—Continued

Name and Description	Matures	50 per 50	100-250 per 100	300-450 per 100	500-950 per 100	1000-2450 per 100	2500 up per 100
MARY GOLD. Lemon yellow. M. Pom. Pinch 7-28.	11-18	\$2.50	\$4.75	\$4.50	\$4.25	\$4.00	\$3.75
BOJANGLES. Yellow Daisy. Pinch 7-24.....	11-20	4.50	8.55	8.10	7.65	7.20	6.75
SD KLONDIKE. Orange yellow. M. Pom. Pinch 7-24.	11-20	4.50	8.55	8.10	7.65	7.20	6.75
S LOLLIPOP. Lemon yellow. Pom. Pinch 7-24.....	11-20	4.50	8.55	8.10	7.65	7.20	6.75
PIPPIN (New). M. Pom. Pinch 7-24.....	11-20	5.00	9.50	9.00	8.50	8.00	7.50
SDP YELLOW L. I. BEAUTY. Pinch 7-24.....	11-20	4.00	7.60	7.20	6.80	6.40	6.00
D YELLOW NEVADA. Med. Anem. Pinch 7-24.....	11-20	3.00	5.70	5.40	5.10	4.80	4.50

12-Week Varieties

CHAMPAGNE. Yellow. M. Sgl. Pinch 7-28.....	11-25	4.00	7.60	7.20	6.80	6.40	6.00
GOLDENROD (New). M. Pom. Pinch 7-28.....	11-25	5.00	9.50	9.00	8.50	8.00	7.50
GOLDSMITH. Golden yellow. L. Dec. Pinch 7-28...	11-25	3.25	6.15	5.85	5.50	5.20	4.85
HIGHLANDER (New). M. Formal Dec. Pinch 7-28.	11-25	5.00	9.50	9.00	8.50	8.00	7.50
ILLINI GOLD. Deep golden yellow. M. Pom. Pinch 7-28	11-25	3.25	6.15	5.85	5.50	5.20	4.85
SUNNYSIDE. Golden yellow. M. Pom. Pinch 7-28.	11-25	2.75	5.20	4.95	4.65	4.40	4.10
YELLOW PRISCILLA (New). Lemon. M. Pom. Pinch 7-28	11-25	5.00	9.50	9.00	8.50	8.00	7.50
YELLOW ROLINDA. Light buff yellow. M. Anem. Pinch 7-28	11-25	3.00	5.70	5.40	5.10	4.80	4.50
YELLOW USONA (New). Rich yellow sport of White Usona. Pinch 7-28	11-25	3.50	6.65	6.30	5.95	5.60	5.25
GOLDEN JANE. Golden yellow. L. Sgl. Pinch 8-1.	11-28	3.00	5.70	5.40	5.10	4.80	4.50
YELLOW VALENCIA. Sport of Valencia. Pinch 7-28.	11-28	3.00	5.70	5.40	5.10	4.80	4.50
YELLOW CORDOVA. Lemon yellow. M. Dec. Pinch 7-28	11-30	2.75	5.20	4.95	4.65	4.40	4.10
S NOSEGAY. Yellow. S. Pom. Pinch 7-28.....	12-1	5.00	9.50	9.00	8.50	8.00	7.50
OMEGA. Lemon yellow. M. Pom. Pinch 7-28.....	12-1	3.00	5.70	5.40	5.10	4.80	4.50

13-Week Varieties

GOLDEN HARVEST. Deep gold. S. Pom. Pinch 8-1.	12-5	4.00	7.60	7.20	6.80	6.40	6.00
BRANDYWINE. Orange yellow. M. Dec. Pinch 8-1.	12-5	5.00	9.50	9.00	8.50	8.00	7.50
CINDERELLA. Yellow. M. Sgl. Pinch 8-1.....	12-5	4.00	7.60	7.20	6.80	6.40	6.00
S GOLDTONE. Yellow. M. Sgl. Pinch 8-1.....	12-5	4.50	8.55	8.10	7.65	7.20	6.75
JACK-POT (New). Golden yellow. L. Dec. Pinch 8-1.	12-5	5.00	9.50	9.00	8.50	8.00	7.50
SYMMETRY. M. Pom. Pinch 8-1.....	12-5	5.00	9.50	9.00	8.50	8.00	7.50
YELLOW CAMEO. Deep lemon yellow. M. Pom. Pinch 8-1	12-5	3.00	5.70	5.40	5.10	4.80	4.50
YELLOW SWAN. Sport of Swan. Pinch 8-1.....	12-5	3.50	6.65	6.30	5.95	5.60	5.25
D YELLOW SUPREME. Buff yellow. L. Anem. Pinch 8-2.	12-10	3.25	6.15	5.85	5.50	5.20	4.85
CHALLENGE. Yellow. M. Sgl. Pinch 8-2.....	12-12	4.50	8.55	8.10	7.65	7.20	6.75
S CORSAIR. L. Pom. Pinch 8-2.....	12-12	5.00	9.50	9.00	8.50	8.00	7.50

14-Week Varieties

YELLOW RIVIERA. Sport of Riviera. Pinch 8-4....	12-15	4.00	7.60	7.20	6.80	6.40	6.00
YELLOW SNOWCREST (New). Sport of Snowcrest. Pinch 8-4	12-15	5.00	9.50	9.00	8.50	8.00	7.50

IMPORTANT: ABSOLUTELY NO CHANGES ON YOUR ORDER CAN BE ACCEPTED WITHIN 30 DAYS OF DELIVERY DATE.

Pompons, Singles and Anemones

YELLOW—Continued

Name and Description	Matures	50 per 50	100-250 per 100	300-450 per 100	500-950 per 100	1000-2450 per 100	2500 up per 100
DECEMBER GOLD. Deep golden yellow. M. Dec.							
Pinch 8-4	12-15	\$3.00	\$5.70	\$5.40	\$5.10	\$4.80	\$4.50
SEQUIN. S. Pom. Pinch 8-4.....	12-15	4.50	8.55	8.10	7.65	7.20	6.75
SHAMROCK. L. Dec. Pinch 8-4.....	12-15	4.50	8.55	8.10	7.65	7.20	6.75
REVELRY (New). M. Dec. Pinch 8-7.....	12-20	5.00	9.50	9.00	8.50	8.00	7.50
SUNRISE. Yellow. M. Pom. Pinch 8-7.....	12-20	5.00	9.50	9.00	8.50	8.00	7.50
VIBRANT. Deep lemon yellow. M. Dec. Pinch 8-4.	12-20	3.00	5.70	5.40	5.10	4.80	4.50
GOLDEN ANNIVERSARY. Yellow. Pom. Pinch 8-7.	12-25	3.50	6.65	6.30	5.95	5.60	5.25
SIREN. Yellow. Dec. Pinch 8-7.....	12-25	4.50	8.55	8.10	7.65	7.20	6.75
YELLOW REVELATION. Sport. Pinch 8-7.....	12-25	3.50	6.65	6.30	5.95	5.60	5.25
YELLOW SNOW. Deep lemon yellow. M. Pom.							
Pinch 8-7.	12-25	2.75	5.20	4.95	4.65	4.40	4.10
YULEFLAME. Yellow. Dec. Pinch 8-7.....	12-25	3.50	6.65	6.30	5.95	5.60	5.25

BRONZE AND RED

Best bronze and reds for August, *Firebird; September, Seneca; October, *Bronze Masterpiece; November, Red Rust, Bronze Masterpiece; Thanksgiving, Bronze Goldsmith; December, Debonair; Christmas, Christmas Star.

Name and Description	Matures	50 per 50	100-250 per 100	300-450 per 100	500-950 per 100	1000-2450 per 100	2500 up per 100
7-Week Varieties							
MARIONETTE. Rust red. Pom.....	10-1	\$4.50	\$8.55	\$8.10	\$7.65	\$7.20	\$6.75
FIRECRACKER (New). Mahogany bronze. M. Dec.							
Pinch 7-1	10-5	5.00	9.50	9.00	8.50	8.00	7.50
BAMBOO. Buff bronze. Daisy. Pinch 7-4.....	10-10	4.50	8.55	8.10	7.65	7.20	6.75
BLUEBLOOD (New). Deep amaranth. M. Dec. Pinch							
7-4	10-10	5.00	9.50	9.00	8.50	8.00	7.50
CALICO. Coral bronze. Daisy. Pinch 7-4.....	10-10	4.50	8.55	8.10	7.65	7.20	6.75
CARAVAN (New). Salmon bronze. M. Dec. Pinch							
7-4	10-10	5.00	9.50	9.00	8.50	8.00	7.50
FIRESIDE. Burnt orange and salmon. Dec. Pinch 7-4.	10-10	4.50	8.55	8.10	7.65	7.20	6.75
ADMIRAL (New). Crimson. M. Dec. Pinch 7-5.....	10-12	5.00	9.50	9.00	8.50	8.00	7.50
FASHION. Salmon and rosewood. M. Dec. Pinch 7-4.	10-12	4.50	8.55	8.10	7.65	7.20	6.75
NOCTURNE. Crimson. S. Pom. Pinch 7-5.....	10-12	4.50	8.55	8.10	7.65	7.20	6.75
NOKOMIS. Bronze. M. Dec. Pinch 7-5.....	10-12	4.50	8.55	8.10	7.65	7.20	6.75
WITCHERY. Golden bronze. M. Dec. Pinch 7-5....	10-12	4.50	8.55	8.10	7.65	7.20	6.75

8-Week Varieties

Name and Description	Matures	50 per 50	100-250 per 100	300-450 per 100	500-950 per 100	1000-2450 per 100	2500 up per 100
COCKTAIL (New). Salmon orange. M. Pom. Pinch							
7-8	10-15	5.00	9.50	9.00	8.50	8.00	7.50
DETROITER. Reddish bronze. S. Pom. Pinch 7-8....	10-15	4.00	7.60	7.20	6.80	6.40	6.00
RAJAH (New). Scarlet red. M. Sgl. Pinch 7-8.....	10-15	5.00	9.50	9.00	8.50	8.00	7.50
ROBINHUE. Red. M. Dec. Pinch 7-8.....	10-15	4.50	8.55	8.10	7.65	7.20	6.75
JAMES STEWART. Apricot Gold. S. Pom. Pinch 7-8.	10-15	4.50	8.55	8.10	7.65	7.20	6.75
S ADELAIDE. Dark reddish bronze. S. Pom. Pinch 7-15.	10-20	2.75	5.20	4.95	4.65	4.40	4.10
S JEMIMA. Dark reddish bronze. M. Pom. Pinch 7-15.	10-20	2.75	5.20	4.95	4.65	4.40	4.10

9-Week Varieties

Name and Description	Matures	50 per 50	100-250 per 100	300-450 per 100	500-950 per 100	1000-2450 per 100	2500 up per 100
BONTON. Bronze. M. Pom. Pinch 7-15.....	10-25	3.25	6.15	5.85	5.50	5.20	4.85
S BRONZE DOT. Sport of Pink Dot. Pinch 7-12.....	10-25	2.75	5.20	4.95	4.65	4.40	4.10
S BUCKSKIN. Tawny bronze. Daisy. Pinch 7-12.....	10-25	4.50	8.55	8.10	7.65	7.20	6.75
S FIREBIRD. Dk. reddish bronze. M. Dec. Pinch 7-14.	10-25	2.75	5.20	4.95	4.65	4.40	4.10
RED DOT. Yellow bronze, red center. M. Pom. Pinch							
7-15	10-25	3.50	6.65	6.30	5.95	5.60	5.25
S FIREFLY. Orange red. M. Pom. Pinch 7-14.....	11-1	4.50	8.55	8.10	7.65	7.20	6.75

*Starred varieties must be shaded to flower at this time.

Pompons, Singles and Anemones

Types are abbreviated as follows. Pom.—Pompon; Dec.—Decorative; Sgl.—Single; Anem.—Anemone. Size of flower is indicated by S—Small; M—Medium; L—Large.

S—Indicates varieties we find most suitable for shading. D—Indicates varieties suitable to grow as disbudded Pompons.
P—Indicates varieties suitable for pot plants.

Pinching and flowering dates given here are for normal flowering without shading or lights.

Note carefully instructions for ordering on page 3. No orders for less than 50 rooted cuttings of a variety accepted. Minimum total order, 500 cuttings.

BRONZE AND RED—Continued

Name and Description	Matures	50 per 50	100-250 per 100	300-450 per 100	500-950 per 100	1000-2450 per 100	2500 up per 100
OCTOBER BRONZE. Light bronze. M. Sgl. Pinch							
7-16	10-28	\$3.25	\$6.15	\$5.85	\$5.50	\$5.20	\$4.85
BRONZE DAISY. Pinch 7-14.....	11-1	3.00	5.70	5.40	5.10	4.80	4.50
BUCCANEER (New). Orange apricot. M. Sgl. Pinch							
7-14	11-1	5.00	9.50	9.00	8.50	8.00	7.50
S RED SENECA. Orange bronze. M. Dec. Pinch 7-14.	11-1	4.00	7.60	7.20	6.80	6.40	6.00
NAVAHO. Deep crimson. M. Pom. Pinch 7-14.....	11-1	3.00	5.70	5.40	5.10	4.80	4.50
S SENECA. Orange bronze. M. Dec. Pinch 7-14.....	11-1	3.25	6.15	5.85	5.50	5.20	4.85
S RED DAISY. Deep red. M. Sgl. Pinch 7-14.....	11-1	3.25	6.15	5.85	5.50	5.20	4.85
BRONZE BUCKINGHAM. Light orange bronze. M.							
Sgl. Pinch 7-15.....	11-3	2.75	5.20	4.95	4.65	4.40	4.10

10-Week Varieties

S BEAUREGARD. Reddish orange. M. Pom. Pinch 7-19.	11-5	4.50	8.55	8.10	7.65	7.20	6.75
BITTERSWEET. Bittersweet red. M. Sgl. Pinch 7-14.	11-5	3.00	5.70	5.40	5.10	4.80	4.50
S BUTTERSCOTCH. Golden bronze. M. Pom. Pinch							
7-20	11-5	4.00	7.60	7.20	6.80	6.40	6.00
CASSANDRA. Orange bronze. M. Pom. Pinch 7-14..	11-5	3.00	5.70	5.40	5.10	4.80	4.50
S MAGICIAN. Bronze. L. Pom. Pinch 7-14.....	11-5	4.50	8.55	8.10	7.65	7.20	6.75
S RED RUST. Reddish bronze. M. Pom. Pinch 7-14....	11-5	3.00	5.70	5.40	5.10	4.80	4.50
S RUBICON. Bronze red. M. Dec. Pinch 7-14.....	11-5	4.00	7.60	7.20	6.80	6.40	6.00
P GYPSY. Light reddish bronze. S. Anem. Pinch 7-15.	11-8	2.75	5.20	4.95	4.65	4.40	4.10
BRONZE LINDA LOU. Sport of Linda Lou. Pinch							
7-19	11-10	4.00	7.60	7.20	6.80	6.40	6.00
BRONZE THYRA. Sport of Thyra. L. Pom. Pinch							
7-19	11-10	4.00	7.60	7.20	6.80	6.40	6.00
D BRONZE TUXEDO. Buff. Med. L. Anem. Pinch 7-19.	11-10	3.25	6.15	5.85	5.50	5.20	4.85
S CHANTICLEER. Reddish bronze. L. Pom. Pinch 7-19.	11-10	4.50	8.55	8.10	7.65	7.20	6.75
S CHEVRON. Orange red. M. Dec. Pinch 7-19.....	11-10	4.50	8.55	8.10	7.65	7.20	6.75
SP COPPERHEAD. Coppery bronze. L. Dec. Pinch 7-20.	11-10	4.50	8.55	8.10	7.65	7.20	6.75
EUROPA. Cardinal red. L. Sgl. Pinch 7-19.....	11-10	4.00	7.60	7.20	6.80	6.40	6.00
ILLINI BURMA (New). Light bronze. L. Pom. Pinch							
7-19	11-10	5.00	9.50	9.00	8.50	8.00	7.50
MASON'S BRONZE. Burnt Orange. L. Sgl. Pinch							
7-19	11-10	3.25	6.15	5.85	5.50	5.20	4.85

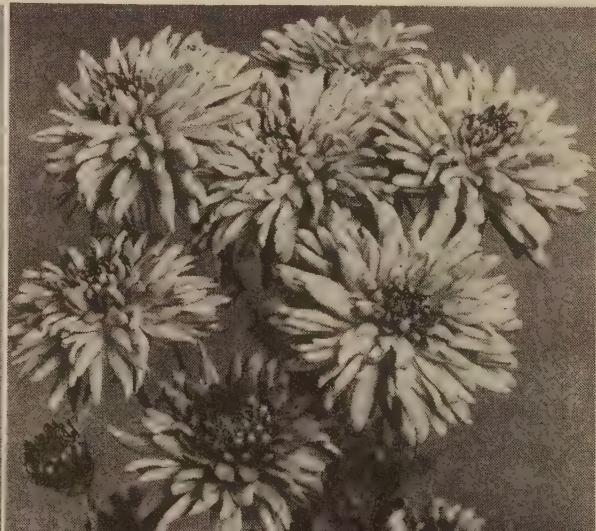
RUBICON

Excellent deep, brilliant bronze. Flowers naturally early November.



SAMOVAR

Attractive reddish bronze—a good novelty color.



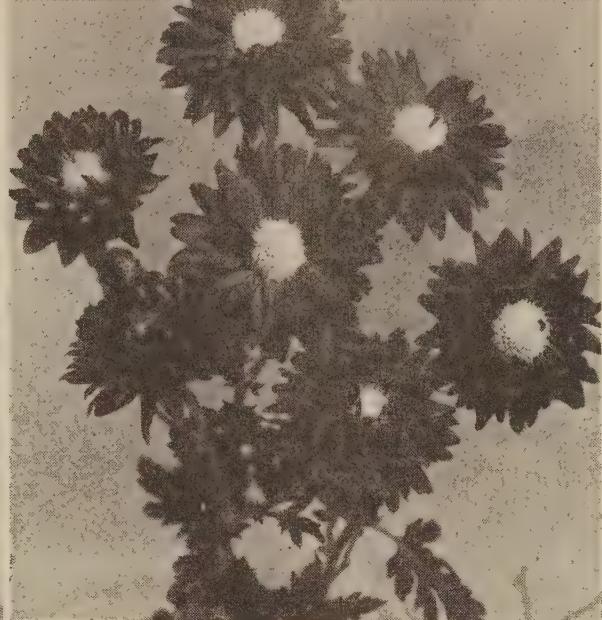
PARAGON

Excellent, large deep bronze. Holds color well shaded. Good producer.



**FESTIVAL**

A very hard, long lasting red single for Thanksgiving. Fine shaded also. Medium length stem.

**GALAXY**

Orange scarlet single for early December.

**BRONZE GOLDSMITH**

Fine large orange sport of Goldsmith.

Pompons, Singles and Anemones

Types are abbreviated as follows. Pom.—Pompon; Dec.—Decorative; Sgl.—Single; Anem.—Anemone. Size of flower is indicated by S—Small; M—Medium; L—Large.

S—Indicates varieties we find most suitable for shading. D—Indicates varieties suitable to grow as disbudded Pompons. P—Indicates varieties suitable for pot plants.

Pinching and flowering dates given here are for normal flowering without shading or lights.

Note carefully instructions for ordering on page 3. No orders for less than 50 rooted cuttings of a variety accepted. Minimum total order, 500 cuttings.

BRONZE AND RED—Continued

Name and Description	Matures	50 per 50	100-250 per 100	300-450 per 100	500-950 per 100	1000-2450 per 100	2500 up per 100
MASON'S RED. Scarlet. L. Sgl. Pinch 7-19.....	11-10	\$3.25	6.15	\$5.85	\$5.50	\$5.20	\$4.85
S SAMOVAR. Reddish bronze. M. Pom. Pinch 7-19...	11-10	4.00	7.60	7.20	6.80	6.40	6.00
SYLVANNA. Orange bronze. M. Sgl. Pinch 7-19...	11-10	3.00	5.70	5.40	5.10	4.80	4.50
D THE TITAN. Scarlet crimson. L. Anem. Pinch 7-19.	11-10	3.25	6.15	5.85	5.50	5.20	4.85
S GOLD BRAID. Yellow, bronze-red center. M. Pom. Pinch 7-19	11-12	5.00	9.50	9.00	8.50	8.00	7.50
S BRONZE MASTERPIECE. Rosewood bronze. M. Pom. Pinch 7-19	11-12	2.75	5.20	4.95	4.65	4.40	4.10
S DARK BRONZE MASTERPIECE. Sport. M. Pom. Pinch 7-19	11-12	4.00	7.60	7.20	6.80	6.40	6.00
S PARAGON. Red. L. Pom. Pinch 7-19.....	11-12	4.50	8.55	8.10	7.65	7.20	6.75

11-Week Varieties

BRONZE PRINCETON. Bronze sport of Princeton. Pinch 7-22	11-15	3.25	6.15	5.85	5.50	5.20	4.85
S MRS. DEWEY. Deep bronze. L. Sgl. Pinch 7-25....	11-15	4.50	8.55	8.10	7.65	7.20	6.75
RED PRINCETON. Brazil red. M. Dec. Pinch 7-24..	11-15	3.25	6.15	5.85	5.50	5.20	4.85
SHALIMAR (New). Orange bronze. M. Anem. Pinch 7-24	11-15	5.00	9.50	9.00	8.50	8.00	7.50
ILLINI REDHEAD. Deep red. S. Pom. Pinch 7-23..	11-17	4.00	7.60	7.20	6.80	6.40	6.00
BOURBON. Rust bronze. M. Sgl. Pinch 7-25.....	11-20	4.00	7.60	7.20	6.80	6.40	6.00
ILLINI WARRIOR. Bronzy orange. Button Pom. Pinch 7-25	11-20	4.00	7.60	7.20	6.80	6.40	6.00
LEGAL TENDER. Bronze and gold. M. Dec. Pinch 7-24	11-20	2.50	4.75	4.50	4.25	4.00	3.75
RUSTICON. Rust red. M. Pom. Pinch 7-25.....	11-20	3.00	5.70	5.40	5.10	4.80	4.50
S THELMA. Orange scarlet. M. Pom. Pinch 7-25.....	11-20	5.00	9.50	9.00	8.50	8.00	7.50
CAROUSEL. Coral bronze. M. Sgl. Pinch 7-25.....	11-22	4.50	8.55	8.10	7.65	7.20	6.75
D RED ROLINDA. Red. M. Anem. Pinch 7-24.....	11-23	3.00	5.70	5.40	5.10	4.80	4.50
BRONZE MINUET. Bronze Pom. Pinch 7-28.....	11-25	3.50	6.65	6.30	5.95	5.60	5.25
FESTIVAL. Apricot red. S. Sgl. Pinch 7-28.....	11-25	4.00	7.60	7.20	6.80	6.40	6.00

Pompons, Singles and Anemones

BRONZE AND RED—Continued

Name and Description	Matures	50 per 50	100-250 per 100	300-450 per 100	500-950 per 100	1000-2450 per 100	2500 up per 100
12-Week Varieties							
BRONZE GOLDSMITH. Mars orange. M. Dec. Pinch 7-28	11-25	\$3.25	\$6.15	\$5.85	\$5.50	\$5.20	\$4.85
FALCON. Reddish bronze. M. Pom. Pinch 7-28	11-25	4.50	8.55	8.10	7.65	7.20	6.75
YOLANDA. Orange bronze. S. Anem. Pinch 7-28	11-25	2.50	4.75	4.50	4.25	4.00	3.75
D APRICOT VALENCIA. L. Sgl. Pinch 7-28	11-28	3.00	5.70	5.40	5.10	4.80	4.50
D CRIMSON VALENCIA. Sport of Valencia. L. Sgl. Pinch 7-28	11-28	4.00	7.60	7.20	6.80	6.40	6.00
S INDIAN HEAD. Reddish apricot. M. Sgl. Pinch 7-28	11-28	4.50	8.55	8.10	7.65	7.20	6.75
AMBERINA (New). Orange bronze. M. Dec. Pinch 7-28	12-1	5.00	9.50	9.00	8.50	8.00	7.50
GALAXY. Orange scarlet. M. Sgl. Pinch 7-28	12-1	4.00	7.60	7.20	6.80	6.40	6.00
13-Week Varieties							
DAZZLER. Coppery bronze. L. Sgl. Anem. center. Pinch 7-28	12-5	5.00	9.50	9.00	8.50	8.00	7.50
DEBONAIR. Crimson red. L. Pom. Pinch 7-28	12-5	3.00	5.70	5.40	5.10	4.80	4.50
MAHOGANY VIKING. Mahogany bronze. M. Sgl. Pinch 7-28	12-5	3.50	6.65	6.30	5.95	5.60	5.25
D BRONZE SUPREME. Bronze sport of Supreme. L. Anem. Pinch 8-1	12-10	3.25	6.15	5.85	5.50	5.20	4.85
CAVALCADE. Mandarin red. M. Pom. Pinch 8-5	12-10	3.50	6.65	6.30	5.95	5.60	5.25
HARLEQUIN (New). Crimson red. M. Dec. Pinch 8-4	12-10	5.00	9.50	9.00	8.50	8.00	7.50
HOLIDAY. Wide-petaled crimson red. M. Sgl. Pinch 8-4	12-10	4.00	7.60	7.20	6.80	6.40	6.00
PAGEANTRY. Red. M. Pom. Pinch 8-5	12-10	4.50	8.55	8.10	7.65	7.20	6.75
D RED SUPREME. Sport of Dk. Pk. Supreme. L. Anem. Pinch 8-5	12-10	4.00	7.60	7.20	6.80	6.40	6.00
BRONZE MINSTREL. Sport of Minstrel. Pom. Pinch 8-1	12-13	4.00	7.60	7.20	6.80	6.40	6.00
CHRISTMAS STAR. Scarlet red. M. Sgl. Pinch 8-4	12-12	3.50	6.65	6.30	5.95	5.60	5.25
14-Week Varieties							
BRONZE RIVIERA. Sport of Riviera. Pinch 8-1	12-15	4.00	7.60	7.20	6.80	6.40	6.00
CHRISTMAS GREETING. Crimson-scarlet. M. Dec. Pinch 8-4	12-15	4.50	8.55	8.10	7.65	7.20	6.75
P CLARET. Brilliant red. M. Sgl. Pinch 8-4	12-15	5.00	9.50	9.00	8.50	8.00	7.50
SARONG. Crimson. M. Sgl. Pinch 8-4	12-15	3.25	6.15	5.85	5.50	5.20	4.85
TOPAZ (New). Orange bronze. M. Sgl. Pinch 8-4	12-15	5.00	9.50	9.00	8.50	8.00	7.50
MERRYMAKER. Scarlet. M. Sgl. Pinch 8-7	12-20	4.00	7.60	7.20	6.80	6.40	6.00
POINSETTIA (New). Scarlet red. L. Sgl. Pinch 8-7	12-20	5.00	9.50	9.00	8.50	8.00	7.50

PINK

Best pinks for August, *Carolyn Yosick; September, *Carolyn Yosick; October, *Masterpiece, Carolyn Yosick, November, Thyra, Masterpiece; Thanksgiving, Minnet; December, Riviera; Christmas, Minstrel.

Name and Description	Matures	50 per 50	100-250 per 100	300-450 per 100	500-950 per 100	1000-2450 per 100	2500 up per 100
7-Week Varieties							
ARGONNE. Amaranth. Pom. Pinch 7-4	10-10	\$4.00	\$7.60	\$7.20	\$6.80	\$6.40	\$6.00
COURTIER (New). Lavender pink. Dec. Pinch 7-4	10-10	5.00	9.50	9.00	8.50	8.00	7.50
DREAM GIRL. M. Pom. Pinch 7-4	10-10	4.00	7.60	7.20	6.80	6.40	6.00
JOYBRINGER. Salmon rose. M. Pom. Pinch 7-4	10-10	4.50	8.55	8.10	7.65	7.20	6.75
LASSIE (New). Dark pink. M. Dec. Pinch 7-4	10-10	5.00	9.50	9.00	8.50	8.00	7.50
SERENADE. Magenta pink. M. Sgl. Pinch 7-4	10-10	4.50	8.55	8.10	7.65	7.20	6.75
SWEETHEART. Lavender pink. M. Sgl. Pinch 7-4	10-10	4.50	8.55	8.10	7.65	7.20	6.75

*Starred varieties must be shaded to flower at this time.

Pompons, Singles and Anemones

Types are abbreviated as follows. Pom.—Pompon; Dec.—Decorative; Sgl.—Single; Anem.—Anemone. Size of flower is indicated by S—Small; M—Medium; L—Large.

S—Indicates varieties we find most suitable for shading. D—Indicates varieties suitable to grow as disbudded Pompons. P—Indicates varieties suitable for pot plants.

Pinching and flowering dates given here are for normal flowering without shading or lights.

Note carefully instructions for ordering on page 3. No orders for less than 50 rooted cuttings of a variety accepted. Minimum total order, 500 cuttings.

PINK—Continued

Name and Description	Matures	50 per 50	100-250 per 100	300-450 per 100	500-950 per 100	1000-2450 per 100	2500 up per 100
ADAGIO. Coppery rose Pom. Tall. Pinch 7-4.....	10-12	\$4.50	\$8.55	\$8.10	\$7.65	\$7.20	\$6.75
MASQUERADE. S. Pom. Pinch 7-8.....	10-12	3.50	6.65	6.30	5.95	5.60	5.25
SALUTE. Deep pink. S. Sgl. Pinch 7-8.....	10-12	4.50	8.55	8.10	7.65	7.20	6.75

8-Week Varieties

DARK JEWEL. Deep lavender. S. Pom. Pinch 7-10.	10-15	3.00	5.70	5.40	5.10	4.80	4.50
JEWEL. Lavender. S. Pom. Pinch 7-10.....	10-15	3.00	5.70	5.40	5.10	4.80	4.50
S CAROLYN YOSICK. Lavender. S. Dec. Pinch 7-8.	10-20	3.00	5.70	5.40	5.10	4.80	4.50
ECSTASY. Lavender. M. Pom. Pinch 7-20.....	10-20	2.75	5.20	4.95	4.65	4.40	4.10
CAPT. COOK. Deep rose pink. M. Pom. Pinch 7-15.	10-23	2.75	5.20	4.95	4.65	4.40	4.10
PINK SPRITE. Light orchid. S. Pom. Pinch 7-14....	10-23	4.00	7.60	7.20	6.80	6.40	6.00
S MARY McARTHUR. Pink, shaded bronze. S. Pom. Pinch 7-14	10-23	3.50	6.65	6.30	5.95	5.60	5.25

9-Week Varieties

BETTY ROSE. Lavender. L. Anem. Pinch 7-14.....	10-25	3.25	6.15	5.85	5.50	5.20	4.85
DARK PINK DOT. Deep pink sport. Pinch 7-14....	10-25	2.75	5.20	4.95	4.65	4.40	4.10
EDITH ROBERTS. Light orchid pink. S. Pom. Pinch 7-14	10-25	3.50	6.65	6.30	5.95	5.60	5.25
S JESSIE. Light lavender. M. Pom. Pinch 7-14.....	10-25	2.75	5.20	4.95	4.65	4.40	4.10
OCTOBER PINK. Light lavender. M. Sgl. Pinch 7-14.	10-25	3.25	6.15	5.85	5.50	5.20	4.85
S PINK DOT. Light pink. M. Pom. Pinch 7-14.....	10-25	2.75	5.20	4.95	4.65	4.40	4.10
REWARD. Deep pink. M. Sgl. Pinch 7-14.....	10-25	4.50	8.55	8.10	7.65	7.20	6.75
BALLERINA. Pink. M. Sgl. Pinch 7-16.....	11-1	4.00	7.60	7.20	6.80	6.40	6.00
D LILLIAN DOTY. Light rose pink. L. Pom. Pinch 7-16.	11-1	2.75	5.20	4.95	4.65	4.40	4.10
PINK CALIFORNIA DAISY. M. Sgl. Pinch 7-16....	11-1	3.50	6.65	6.30	5.95	5.60	5.25
W. H. BUCKINGHAM. Rose. M. Sgl. Pinch 7-15....	11-1	2.75	5.20	4.95	4.65	4.40	4.10

10-Week Varieties

DREAMBOAT. Lavender pink. M. Pom. Pinch 7-16.	11-5	3.00	5.70	5.40	5.10	4.80	4.50
DARK BULKELEY. Dark rose pink. M. Pom. Pinch 7-20	11-8	3.25	6.15	5.85	5.50	5.20	4.85
DARK LINDA LOU. Sport of Linda Lou. Pinch 7-20.	11-10	2.75	5.20	4.95	4.65	4.40	4.10
LINDA LOU. Pink, yellow cushion. M. Anem. Pinch 7-20	11-10	2.75	5.20	4.95	4.65	4.40	4.10
LULABEL. Yellow cushion. M. Anem. Pinch 7-20...	11-10	3.50	6.65	6.30	5.95	5.60	5.25
MISS CLARINDA (New). Light lavender. M. Pom. Pinch 7-20	11-10	5.00	9.50	9.00	8.50	8.00	7.50
PANDORA (New). Luminous pink. L. Dec. Pinch 7-20	11-10	5.00	9.50	9.00	8.50	8.00	7.50
S SOPRANO. Pink. M. Sgl. Pinch 7-20.....	11-10	4.00	7.60	7.20	6.80	6.40	6.00
PS THYRA. Lavender. M. Pom. Pinch 7-19.....	11-10	3.00	5.70	5.40	5.10	4.80	4.50
D TUXEDO. Pink. L. Anem. Pinch 7-19.....	11-10	3.25	6.15	5.85	5.50	5.20	4.85
S MASTERPIECE. Tourmaline pink. M. Pom. Pinch 7-22	11-12	2.75	5.20	4.95	4.65	4.40	4.10
MEMORIAL (New). M. Anem. Pinch 7-22.....	11-12	5.00	9.50	9.00	8.50	8.00	7.50
ROSE MASTERPIECE. Rose pink sport of Masterpiece. Pinch 7-22	11-12	3.50	6.65	6.30	5.95	5.60	5.25
SALMON MASTERPIECE. Salmon pink sport of Masterpiece. Pinch 7-22	11-12	3.50	6.65	6.30	5.95	5.60	5.25
S TAFFETA. Deep pink. M. Dec. Pinch 7-22.....	11-12	4.50	8.55	8.10	7.65	7.20	6.75

Pompons, Singles and Anemones

PINK—Continued

Name and Description	Matures	50 per 50	100-250 per 100	300-450 per 100	500-950 per 100	1000-2450 per 100	2500 up per 100
11-Week Varieties							
S BROCADE. Shell pink. M. Sgl. Pinch 7-24.....	11-15	\$2.75	\$5.20	\$4.95	\$4.65	\$4.40	\$4.10
D DARK NORMA. Deep lavender. L. Anem. Pinch 7-25.	11-15	3.25	6.15	5.85	5.50	5.20	4.85
D FREIDA. Light lavender. L. Anem. Pinch 7-22.....	11-15	3.00	5.70	5.40	5.10	4.80	4.50
D NORMA. Pink petals, salmon cushion. L. Anem. Pinch 7-22.....	11-15	3.25	6.15	5.85	5.50	5.20	4.85
MERMAID (New). M. Sgl. Pinch 7-25.....	11-15	5.00	9.50	9.00	8.50	8.00	7.50
P ORCHID BEAUTY. Orchid, golden cushion. M. Anem. Pinch 7-22.....	11-15	2.75	5.20	4.95	4.65	4.40	4.10
GRANDSLAM (New). Silvery shell pink. L. Sgl. Pinch 7-24.....	11-20	5.00	9.50	9.00	8.50	8.00	7.50
PS MAJORETTE. Pink. M. Anem. Pinch 7-24.....	11-20	4.50	8.55	8.10	7.65	7.20	6.75
D PINK LONG ISLAND BEAUTY. Pink sport of L. I. Beauty. Pinch 7-24.....	11-20	4.00	7.60	7.20	6.80	6.40	6.00
S PINKY. Pink. M. Dec. Pinch 7-24.....	11-20	4.50	8.55	8.10	7.65	7.20	6.75
VIVACIOUS LADY (New). Spoon type novelty. Pinch 7-24.....	11-20	5.00	9.50	9.00	8.50	8.00	7.50
MINUET. Mauve to rose pink. M. Pom. Pinch 7-24.	11-23	3.00	5.70	5.40	5.10	4.80	4.50
12-Week Varieties							
PD BEAUTIFUL LADY. Lavender. L. Anem. Pinch 7-28.	11-25	3.00	5.70	5.40	5.10	4.80	4.50
HASEGAWA PINK. Lavender. M. Sgl. Pinch 7-28.	11-25	2.50	4.75	4.50	4.25	4.00	3.75
PRINCESS (New). S. Pom. Pinch 7-28.....	11-25	5.00	9.50	9.00	8.50	8.00	7.50
USONA. Lavender. M. Pom. Pinch 7-28.....	11-25	2.75	5.20	4.95	4.65	4.40	4.10
D DARK VALENCIA. Deep pink. M. Sgl. Pinch 8-1..	11-28	3.00	5.70	5.40	5.10	4.80	4.50
ORCHID VALENCIA (New). Deep orchid sport of Valencia. Pinch 7-28	11-28	5.00	9.50	9.00	8.50	8.00	7.50
SALMON VALENCIA. Salmon pink sport of Valencia. Pinch 7-28	11-28	5.00	9.50	9.00	8.50	8.00	7.50
D VALENCIA. Orchid pink. L. Sgl. Pinch 7-28.....	11-28	3.00	5.70	5.40	5.10	4.80	4.50
HERITAGE (New). Dark pink. L. Pom. Pinch 7-28.	12-1	5.00	9.50	9.00	8.50	8.00	7.50
13-Week Varieties							
D DARK ENCHANTRESS. Deep pink sport of Enchantress. L. Anem. Pinch 8-1.....	12-5	4.00	7.60	7.20	6.80	6.40	6.00
D ENCHANTRESS. Deep pink. L. Anem. Pinch 8-1...	12-5	3.25	6.15	5.85	5.50	5.20	4.85
D DARK PINK SUPREME. Lavender. L. Anem. Pinch 8-2	12-10	3.25	6.15	5.85	5.50	5.20	4.85
DEBUTANTE. Large pink single. Pinch 8-1.....	12-10	4.50	8.55	8.10	7.65	7.20	6.75
ILLINI CAMILLE. Light pink. M. Sgl. Pinch 8-1...	12-10	4.50	8.55	8.10	7.65	7.20	6.75
RUFFLED SUPREME. Sport of Dark Pink Supreme. Pinch 8-1	12-10	3.25	6.15	5.85	5.50	5.20	4.85
MINSTREL. Lavender pink. M. Pom. Pinch 8-1....	12-13	3.50	6.65	6.30	5.95	5.60	5.25
14-Week Varieties							
CORONET. Dark pink. M. Sgl. Pinch 8-1.....	12-15	4.50	8.55	8.10	7.65	7.20	6.75
DARK RIVIERA. Sport of Riviera. Pinch 8-10.....	12-15	3.50	6.65	6.30	5.95	5.60	5.25
RIVIERA. Luminous pink. M. Dec. Pinch 8-10.....	12-15	3.00	5.70	5.40	5.10	4.80	4.50
DEFIANCE. True orchid pink. Dec. Pom. Pinch 8-7.	12-20	4.00	7.60	7.20	6.80	6.40	6.00
MEDALLION. Pink. M. Pom. Pinch 8-7.....	12-20	4.50	8.55	8.10	7.65	7.20	6.75
PINK TREASURE ISLAND. Light lavender. M. Dec. Pinch 8-15	12-20	2.50	4.75	4.50	4.25	4.00	3.75
ROSALIND. Rose pink. M. Sgl. Pinch 8-5.....	12-20	2.75	5.20	4.95	4.65	4.40	4.10

IMPORTANT: ABSOLUTELY NO CHANGES ON YOUR ORDER CAN BE ACCEPTED WITHIN 30 DAYS OF DELIVERY DATE.

**NY TODA**

A new early October golden apricot. 30 to 36 inches.

ELIZABETH HOOD

Vigorous, tall, strong stemmed lavender pink. Early October.

MOONLIGHT

A new soft yellow, solid flowered variety for late Sept.

New Garden (HARDY) Varieties

MOONLIGHT (DePetris). Sept. 15. Vivid soft yellow formal decorative about 3 inches across. A very full, solid flower with excellent lasting qualities. A free growing variety which may be grown into compact plants by pinching or allowed to grow into a cutting variety. Good stems and foliage.

BRIGADIER (DePetris). Oct. 1. Large, carmine red pompon. Solid blooms of decorative form. Good, bushy growth and excellent foliage. Stems strong 20" to 24". A nice lively color and quite early. Recommended for garden.

MOGUL (DePetris). Oct. 1. Vivid, orange rust, full decorative of medium size. Vigorous upright growth with strong stems and petioles.

ENTERPRISE (DePetris). Oct. 1. Rich amaranth pink, solid pink pompon suitable for cutting. Good stem and foliage. Medium tall growth.

PRICES all above varieties, each: 50 cuttings for \$7.50; 100-250 cuttings, \$14.50 per 100; 300-450 cuttings, \$14.00 per 100; 500 cuttings or more, \$13.50 per 100.

AVALON (DePetris). Oct. 1. Formal pompon of glowing bronze color. Good stems and foliage with upright growth. Resembles Mme. Chiang Kai Shek in color with an improved growth habit and blooms one week later.

PANORAMA (DePetris). Oct. 8. Dazzling orange rust, small decorative 36" to 39". Small, glossy foliage. Upright growth habit and fairly good for cutting.

ELIZABETH HOOD (DePetris). Oct. 12. Vivid lavender pink; large, full pompon with excellent substance and spray formation. Excellent strong stems, 30" to 36" long, of vigorous growth with very healthy habit and lush foliage. A very fine and productive variety. Excellent for cutting or for pots.

NY TODA (DePetris). Oct. 12. Good sized, duplex daisy with excellent substance. Color golden apricot. Makes good sprays on strong stems 30" to 36". An excellent daisy with healthy growth and fairly good production. A good cutting variety.

WHITE

Types are abbreviated as follows. Pom.—Pompon; Dec.—Decorative; Sgl.—Single. Size of flower is indicated by S—Small; M—Medium; L—Large.

P—Indicates varieties suitable for pots.

C—Indicates varieties suitable for cutting.

Note carefully instructions for ordering on page 3. No orders for less than 50 rooted cuttings of a variety accepted. Minimum total order, 500 cuttings.

Name and Description

- C CANDLELIGHT. Cream-white, yellow center. Dec.....
- P WHITE CUSHION. White, shaded pink at center. Cushion
- C D.D. AHRENS. Free flowering, pure white. Dec.....
- P PAPER WHITE. White. Dec.....
- PC CHRIS COLUMBUS. White with yellow buds. Large Dec...
- CALCITE. White with pale yellow center. Heavy bloomer. Dec.....
- DRIFTED SNOW. A mound of double white flowers, shaded yellow. Dec.....
- P POLAR ICE. Pure white, double, 3 inch flowers. L. Dec....
- C WHITE BOUNTY. White with cream center. Button.....

Height	Matures	50 per 50	100-250 per 100	300-450 per 100	500 up per 100
Med.	9-5	\$3.00	\$5.70	\$5.40	\$5.10
Short	9-8	2.75	5.20	4.95	4.65
Tall	9-10	3.00	5.70	5.40	5.10
Med.	9-10	4.50	8.55	8.10	7.65
Tall	9-15	3.00	5.70	5.40	5.10
Med.	9-15	3.00	5.70	5.40	5.10
Med.	9-15	3.00	5.70	5.40	5.10
Med.	9-15	3.50	6.65	6.30	5.95
Tall	9-15	3.50	6.65	6.30	5.95

Garden (HARDY) Varieties

WHITE—Continued

Name and Description	Height	Matures	50 per 50	100-250 per 100	300-450 per 100	500 up per 100
C WHITE TOWER. Cream. L. Pom.	Tall	9-15	\$4.00	\$7.60	\$7.20	\$6.80
C WHITE WONDER. Ball-shaped white Pompon. L. Pom.	Med.	9-25	3.00	5.70	5.40	5.10
SHALIMAR. Cream. L. Pom.	Tall	9-25	5.00	9.50	9.00	8.50
C WHITE CLOUD. White with delicate pink shading. Dec.	Tall	9-25	3.00	5.70	5.40	5.10
P MORNING STAR. Deep cream. Dec.	Med.	9-25	3.00	5.70	5.40	5.10
MISTY MAID. White. Dec.	Med.	9-25	7.50	14.50	14.00	13.50
PEPITA. Eggshell white, darker center. Button.	Med.	9-29	3.50	6.65	6.30	5.95
SNOWFALL. White, slight cream center. Dec.	Med.	9-29	3.50	6.65	6.30	5.95
ERMINE. Large, wide petaled ivory white. L. Dec.	Med.	10-1	4.50	8.55	8.10	7.65
C WINTERSET. Large white Dec.	Med.	10-1	3.25	6.15	5.85	5.50
AVALANCHE. Cream. L. Dec.	Tall	10-5	3.25	6.15	5.85	5.50
C FRAGRANT. Double white; long stems. Dec.	Tall	10-5	3.25	6.15	5.85	5.50
C YOUDATH'S WHITE. Large flowered, double white. L. Dec.	Med.	10-5	2.75	5.20	4.95	4.65
MONOGRAM. White, single	Short	10-5	4.50	8.55	8.10	7.65
PERFECTION. Cream. L. Inc.	Tall	10-10	4.00	7.60	7.20	6.80
C MRS. FISCHER. Double clear white. Pom.	Tall	10-10	2.75	5.20	4.95	4.65
CLASSIC. White. Button	Tall	10-10	4.50	8.55	8.10	7.65
REOWN. White daisy	Med.	10-10	4.50	8.55	8.10	7.65
PC WHITE SPOON. Pure white	Med.	10-10	2.75	5.20	4.95	4.65
C MODEL O' PERFECTION. White, cream center. Button.	Tall	10-15	2.75	5.20	4.95	4.65
SILVERPLATE. Productive outdoor variety. Dec.	Med.	10-15	4.50	8.55	8.10	7.65
SILVER BALL. White. Pom.	Tall	10-15	2.50	4.75	4.50	4.25
IRENE. White, yellow center. Button.	Med.	10-15	2.75	5.20	4.95	4.65

YELLOW

Name and Description	Height	Matures	50 per 50	100-250 per 100	300-450 per 100	500 up per 100
BUTTERBALL. Butter yellow. Low, compact plant. Button	Short	9-1	\$3.00	\$5.70	\$5.40	\$5.10
P EARLY GOLD. Golden yellow. Pom.	Short	9-5	4.00	7.60	7.20	6.80
YELLOW CUSHION. Light yellow. Cushion.	Short	9-8	2.75	5.20	4.95	4.65
C GOLDEN HOURS. Chrome yellow. Pom.	Med.	9-8	3.25	6.15	5.85	5.50
C W. P. SNYDER. Apricot orange and pink. L. Pom.	Med.	9-10	3.50	6.65	6.30	5.95
P POMPONETTE. Excellent early yellow. Pom.	Short	9-15	3.00	5.70	5.40	5.10
SUNAPEE. Deep lemon. Pom.	Tall	9-15	3.25	6.15	5.85	5.50
P YELLOW SUPREME (H). Bright lemon. Cushion.	Short	9-15	3.00	5.70	5.40	5.10
P YELLOW CHRIS COLUMBUS. Bright lemon. L. Dec.	Med.	9-15	6.25	12.00	11.50	11.00
YELLOW AVALANCHE. Light lemon. L. Dec.	Tall	9-15	3.25	6.15	5.85	5.50
P EARLY YELLOW. Deep lemon. Button.	Short	9-15	2.75	5.20	4.95	4.65
BAMBI. Fawn yellow, amber center. Dec.	Med.	9-15	3.25	6.15	5.85	5.50
DEFIANCE (H). Golden yellow, quilled petals. Dec.	Tall	9-15	3.50	6.65	6.30	5.95
GOLDEN CARPET. Golden yellow. Pom.	Short	9-15	5.00	9.50	9.00	8.50
CANARY WONDER. Canary yellow. Pom.	Med.	9-15	6.25	12.00	11.50	11.00
P M. J. COSTELLO. Golden yellow, bronze shading. Pom.	Short	9-20	3.25	6.15	5.85	5.50
OLD GOLD. An outstanding variety. Golden yellow. Pom.	Med.	9-20	3.25	6.15	5.85	5.50
P SEPTEMBER SUNSHINE. Semi-double bright yellow.	Med.	9-20	3.25	6.15	5.85	5.50
WYCHWOOD. Canary yellow. L. Pom.	Med.	9-20	3.25	6.15	5.85	5.50
C CHARLES NYE. Deep lemon. L. Pom.	Tall	9-25	3.25	6.15	5.85	5.50
P HONEYCOMB. Golden yellow. Pom.	Med.	9-25	3.00	5.70	5.40	5.10
C CATHERINE COLLINS. Lemon yellow. Button.	Tall	9-25	3.25	6.15	5.85	5.50
LEE POWELL. Chinese yellow. L. Dec.	Tall	9-25	6.25	12.00	11.50	11.00
P MOONLIGHT (New). Disbud. Bright yellow.	Med.	9-25	7.50	14.50	14.00	13.50
TANGERINE. Deep orange. L. Dec.	Med.	9-25	3.25	6.15	5.85	5.50
FLAXEN BEAUTY. Golden yellow. L. Dec.	Med.	10-1	6.25	12.00	11.50	11.00

IMPORTANT: ABSOLUTELY NO CHANGES ON YOUR ORDER CAN BE ACCEPTED WITHIN 30 DAYS OF DELIVERY DATE.

Garden (HARDY) Varieties

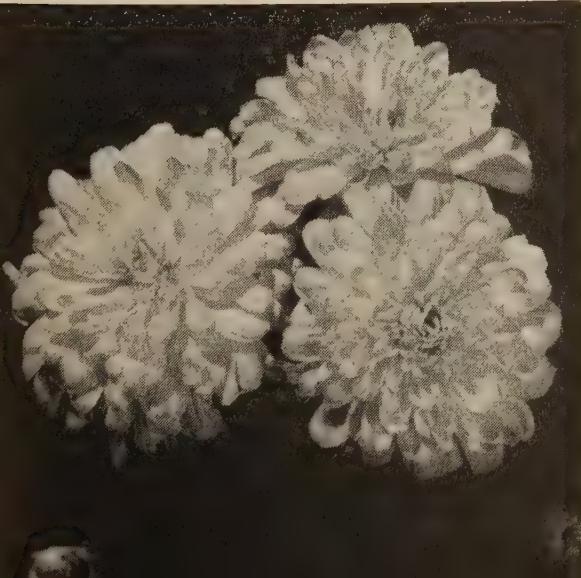
YELLOW—Continued

Name and Description	Height	Matures	50 per 50	100-250 per 100	300-450 per 100	500 up per 100
KING MIDAS. Light lemon yellow. L. Dec.	Med.	10-1	\$2.75	\$5.20	\$4.95	\$4.65
C ZANTHA. Canary yellow. Button	Med.	10-1	3.25	6.15	5.85	5.50
CHIQUITA. Deep lemon. Pom.	Med.	10-1	3.25	6.15	5.85	5.50
C JAMES EADIE. Deep chrome. L. Pom.	Tall	10-5	3.25	6.15	5.85	5.50
C POLARIS. Golden buff. Sgl.	Tall	10-5	4.50	8.55	8.10	7.65
P MRS. ROTAN. Deep chrome. L. Dec.	Med.	10-5	3.25	6.15	5.85	5.50
P YELLOW SPOON. Light yellow Spoon variety	Med.	10-10	2.75	5.20	4.95	4.65
GOLDEN SPOON. Golden yellow	Med.	10-10	2.75	5.20	4.95	4.65
YELLOW BLANKET. Golden yellow Button	Med.	10-10	3.25	6.15	5.85	5.50
BRIGHT FORECAST. Lemon Pom.	Med.	10-10	4.50	8.55	8.10	7.65
P GOLDRUSH. Lemon yellow Sgl.	Med.	10-10	4.50	8.55	8.10	7.65
NYTODA (New). Golden apricot. Sgl.	Med.	10-12	7.50	14.50	14.00	13.50
P LEMONADE. Ivory yellow. Pom.	Med.	10-15	4.50	8.55	8.10	7.65
JUDITH ANDERSON. Golden yellow. Button	Med.	10-15	2.75	5.20	4.95	4.65
RODELL IMP. Light lemon. Button	Med.	10-15	2.50	4.75	4.50	4.25
SWEEPSTAKE. Lemon. Pom.	Med.	10-15	4.50	8.55	8.10	7.65
YELLOW IRENE. Light lemon. Button	Med.	10-15	2.75	5.20	4.95	4.65

BRONZE AND RED

Name and Description	Height	Matures	50 per 50	100-250 per 100	300-450 per 100	500 up per 100
EARLY HARVEST. Mahogany-orange. Cushion	Short	9-8	\$3.25	\$6.15	\$5.85	\$5.50
HARBINGER. Golden bronze. Dec.	Med.	9-8	3.25	6.15	5.85	5.50
P EARLY BRONZE. Orange bronze. Button	Short	9-8	2.75	5.20	4.95	4.65
AUTUMN SONG. Wine-rose. Dec.	Med.	9-10	3.25	6.15	5.85	5.50
C RED GOLD. Red and gold. Button	Med.	9-15	3.25	6.15	5.85	5.50
SEPTEMBER BRONZE. Golden bronze. Frost resistant. Button	Med.	9-20	2.75	5.20	4.95	4.65
GOBLIN. Golden bronze. Pom.	Tall	9-20	2.75	5.20	4.95	4.65
RED GLOW. Dark red. Pom.	Med.	9-20	4.00	7.60	7.20	6.80
SCARLET CRIMSON. Bright red. Dec.	Med.	9-20	3.25	6.15	5.85	5.50
MANDALAY. Orange bronze. Pom.	Tall	9-25	3.25	6.15	5.85	5.50
CHAMPION CUSHION. Deep bronze. Cushion	Short	9-25	2.75	5.20	4.95	4.65
COMMANDER CUSHION. Best red Cushion	Short	9-25	2.75	5.20	4.95	4.65
MAHOGANY CUSHION. Jasper red	Short	9-25	4.00	7.60	7.20	6.80
MARIONETTE. Rust red. Pom.	Med.	9-25	4.50	8.55	8.10	7.65
REMEMBRANCE. Deep carmine. L. Dec.	Med.	9-28	5.00	9.50	9.00	8.50
C KATHLEEN LEHMAN. Orange bronze. L. Dec.	Med.	9-28	5.00	9.50	9.00	8.50
MAYFORDS TRIUMPH. Scarlet bronze. L. Inc.	Tall	9-28	4.00	7.60	7.20	6.80
FIESTA. Orange rust Pom.	Med.	10-1	3.50	6.65	6.30	5.95
INSPIRATION. Apricot-orange. L. Dec.	Tall	10-1	3.25	6.15	5.85	5.50

YELLOW CHRIS COLUMBUS
An excellent bright lemon yellow sport.



ENTERPRISE
A new amaranth pink. Medium tall, good for cutting. Early October.



MOGUL
Vivid orange-rust. Vigorous growth. Oct. 1.



Garden (HARDY) Varieties

BRONZE AND RED—Continued

Name and Description		Height	Matures	50 per 50	100-250 per 100	300-450 per 100	500 up per 100
C	MAGNIFICENT. Plum red. L. Dec.	Tall	10-1	\$3.50	\$6.65	\$6.30	\$5.95
	RED RIDING HOOD. Bright red; frost resistant. Dec.	Med.	10-1	3.25	6.15	5.85	5.50
	SAM WILLISTON. Fiery red. Cushion	Short	10-1	2.75	5.20	4.95	4.65
CP	BONFIRE. Bright red. Dec.	Med.	10-1	3.50	6.65	6.30	5.95
	MOGUL (New). Orange rust. Pom.	Med.	10-1	7.50	14.50	14.00	13.50
	BRIGADIER (New). Carmine red. L. Pom.	Med.	10-1	7.50	14.50	14.00	13.50
	CARDINAL SPOON. Cardinal red, yellow tube. Spoon	Med.	10-1	3.50	6.65	6.30	5.95
	AVALON (New). Orange bronze. Pom.	Tall	10-5	7.50	14.50	14.00	13.50
C	CYDONIA. Mahogany red. L. Dec.	Tall	10-5	2.75	5.20	4.95	4.65
C	MEDITATION. Jasper red. L. Pom.	Tall	10-5	3.25	6.15	5.85	5.50
P	SEPTEMBER CHEER. Cherry red. Sgl.	Med.	10-5	2.75	5.20	4.95	4.65
C	BURGUNDY. Wine red. L. Dec.	Tall	10-5	2.75	5.20	4.95	4.65
	RUBY POMPON. Ruby crimson. Pom.	Med.	10-5	2.75	5.20	4.95	4.65
P	RED VELVET. Dark crimson. L. Dec.	Med.	10-5	3.25	6.15	5.85	5.50
P	MONA. Rust bronze. Pom.	Med.	10-5	4.50	8.55	8.10	7.65
	COURAGEOUS. Dark ruby. Frost resistant. L. Dec.	Med.	10-5	3.25	6.15	5.85	5.50
	SEQUOIA. Light amber. L. Dec.	Med.	10-5	2.75	5.20	4.95	4.65
	PANORAMA (New). Orange rust. Dec.	Tall	10-8	7.50	14.50	14.00	13.50
	AVIATOR. Copper. Pom.	Med.	10-8	3.25	6.15	5.85	5.50
CP	AMBER GLOW. Rosy bronze. L. Dec.	Tall	10-8	3.25	6.15	5.85	5.50
	THE CHIEF. Scarlet and gold. Dec.	Med.	10-10	2.75	5.20	4.95	4.65
P	JAMES STEWART. Apricot-gold. Pom.	Tall	10-10	4.50	8.55	8.10	7.65
	HUNTSMAN. Scarlet orange. L. Dec.	Tall	10-10	4.50	8.55	8.10	7.65
C	AIRWAY DEBUT. Golden bronze. L. Dec.	Med.	10-10	3.25	6.15	5.85	5.50
	BOKHARA. Crimson. Dec.	Med.	10-10	4.00	7.60	7.20	6.80
PC	CARNIVAL. Burnt orange. L. Pom.	Med.	10-10	3.50	6.65	6.30	5.95
C	CARMINE QUEEN. Carmine. L. Pom.	Tall	10-10	4.50	8.55	8.10	7.65
P	BAMBOO. Buff orange. Sgl.	Tall	10-10	4.50	8.55	8.10	7.65
P	CALICO. Coral bronze. Sgl.	Tall	10-10	4.50	8.55	8.10	7.65
	FIRESIDE. Burnt orange. Dec.	Tall	10-10	4.50	8.55	8.10	7.65
	FASHION. Salmon and rosewood. Dec.	Med.	10-12	4.50	8.55	8.10	7.65
P	WITCHERY. Golden bronze. Dec.	Med.	10-12	4.50	8.55	8.10	7.65
	NOKOMIS. Reddish bronze. L. Dec.	Med.	10-12	4.50	8.55	8.10	7.65
	NOCTURNE. Crimson. Pom.	Med.	10-12	4.50	8.55	8.10	7.65
	ROBINHUE. Dark red. L. Dec.	Tall	10-15	4.50	8.55	8.10	7.65
C	BEACON. Coral apricot. L. Dec.	Tall	10-15	4.50	8.55	8.10	7.65
C	BRONZE PYRAMID. Orange bronze. L. Dec.	Tall	10-15	3.25	6.15	5.85	5.50
P	CARMELITA. Apricot bronze. L. Dec.	Tall	10-15	4.50	8.55	8.10	7.65

PINK

Name and Description		Height	Matures	50 per 50	100-250 per 100	300-450 per 100	500 up per 100
	GLADNESS. China rose. Dec.	Short	8-28	\$3.50	\$6.65	\$6.30	\$5.95
C	DR. LONGLEY. Rose pink. Dec.	Med.	9-1	4.50	8.55	8.10	7.65
	SALMON PRECOSE. Salmon pink. L. Dec.	Short	9-1	3.50	6.65	6.30	5.95
	WELCOME. Mallow-purple. Sgl.	Med.	9-1	2.75	5.20	4.95	4.65
	AMBROSIA. Peach pink. Dec.	Med.	9-5	3.50	6.65	6.30	5.95
	PURPLE STAR. Star appearance. Dahlia purple. Pom.	Med.	9-5	2.75	5.20	4.95	4.65
P	MAJOR CUSHION. Deep lavender Cushion	Short	9-8	2.75	5.20	4.95	4.65
C	BARBARA SMALL. Pinkish lavender. Pom.	Tall	9-10	3.25	6.15	5.85	5.50
C	LAVENDER LASSIE. Light lavender Cushion	Short	9-10	5.00	9.50	9.00	8.50
C	NYE'S FAVORITE. Lavender. Dec.	Med.	9-10	3.50	6.65	6.30	5.95
	ORCHID HELEN. Orchid lavender. Dec.	Med.	9-10	5.00	9.50	9.00	8.50
	CHIPPEWA. Bright purple. L. Dec.	Med.	9-15	3.25	6.15	5.85	5.50
C	VIOLET. Amaranth pink. Pom.	Med.	9-15	3.25	6.15	5.85	5.50
	PINK PRINCESS. Light pink. Button	Med.	9-20	3.50	6.65	6.30	5.95

Garden (HARDY) Varieties

PINK—Continued

Name and Description	Height	Matures	50 per 50	100-250 per 100	300-450 per 100	500 up per 100
ACHIEVEMENT. Deep salmon. Dec.	Short	9-20	\$3.25	\$6.15	\$5.85	\$5.50
FAIRBOW. Lavender pink. Pom.	Med.	9-20	3.50	6.65	6.30	5.95
TAPESTRY. Bright pink. L. Dec.	Med.	9-20	5.00	9.50	9.00	8.50
HEATHER BLOOM. Heather pink. Dec.	Med.	9-20	3.00	5.70	5.40	5.10
ALERT. Dark purple. L. Dec.	Med.	9-20	4.00	7.60	7.20	6.80
OLIVE LONGLAND. Apricot-salmon. L. Dec.	Med.	9-25	2.50	4.75	4.50	4.25
CAPT. J. SMITH. Lavender-pink Cushion.	Short	9-25	2.75	5.20	4.95	4.65
C PINK BEAUTY. Salmon pink. Dec.	Med.	9-25	2.75	5.20	4.95	4.65
SEPTEMBER DAWN. Rose pink. Dec.	Med.	9-25	3.00	5.70	5.40	5.10
ROSITA. Persian rose Button	Med.	9-25	3.25	6.15	5.85	5.50
C BETTY. Pink, rose center. L. Dec.	Tall	9-28	3.25	6.15	5.85	5.50
IMP. EARLY WONDER. Deep lavender. Pom.	Med.	9-28	3.00	5.70	5.40	5.10
C PAT. LEHMANN. Peach pink. Dec.	Tall	9-28	5.00	9.50	9.00	8.50
CORAL SEA. Buff rose. Dec.	Med.	10-1	2.75	5.20	4.95	4.65
EARLY WONDER. Lavender. M. Pom.	Med.	10-1	3.00	5.70	5.40	5.10
MYRTLE WALGREEN. Amaranth purple. L. Pom.	Med.	10-1	3.50	6.65	6.30	5.95
C SPELLBOUND. Lavender-pink. Dec.	Med.	10-1	3.25	6.15	5.85	5.50
P TIFFANY ROSE. Deep rose. Sgl.	Med.	10-1	2.75	5.20	4.95	4.65
ENTERPRISE (New). Amaranth. Pom.	Tall	10-5	7.50	14.50	14.00	13.50
P MRS. DUPONT. Peach pink. L. Dec.	Tall	10-5	2.75	5.20	4.95	4.65
PINK SURPRISE. Lavender. Dec.	Tall	10-5	4.00	7.60	7.20	6.80
P LAVENDER LADY. Lavender pink. Dec.	Tall	10-5	3.50	6.65	6.30	5.95
C MELLOW GLOW. Peach pink. Pom.	Tall	10-5	3.50	6.65	6.30	5.95
DREAM GIRL. Light lavender. Pom.	Med.	10-10	4.00	7.60	7.20	6.80
ARGONNE. Dark lavender. Pom.	Med.	10-10	4.00	7.60	7.20	6.80
ORCHID SPOON. Orchid lavender. Spoon	Med.	10-10	2.75	5.20	4.95	4.65
ROSE SPOON. Lavender rose. Spoon	Med.	10-10	2.75	5.20	4.95	4.65
MASQUERADE. Lavender rose. Pom.	Med.	10-10	3.50	6.65	6.30	5.95
JOYBRINGER. Salmon rose Dec.	Short	10-10	4.50	8.55	8.10	7.65
WINSOME. Lavender purple. L. Ref.	Tall	10-10	4.00	7.60	7.20	6.80
SWEETHEART. Light lavender. Sgl.	Tall	10-10	4.50	8.55	8.10	7.65
SERENADE. Magenta Sgl.	Tall	10-10	4.50	8.55	8.10	7.65
ELIZABETH HOOD (New). Lavender pink. L. Pom.	Med.	10-12	7.50	14.50	14.00	13.50
SALUTE. Deep orchid. Sgl.	Tall	10-12	4.50	8.55	8.10	7.65
C ALLEGRO. Shrimp pink. Pom.	Tall	10-12	3.25	6.15	5.85	5.50
ADAGIO. Raspberry rose. Pom.	Tall	10-12	4.50	8.55	8.10	7.65
DAWN ROSE. Grenadine pink. L. Dec.	Med.	10-15	4.00	7.60	7.20	6.80
SYMPHONY. Mauve and lavender. Dec.	Tall	10-15	2.75	5.20	4.95	4.65
P JEWELL. Lavender pink. Pom.	Med.	10-15	3.00	5.70	5.40	5.10
P DARK JEWELL. Dark lavender. Pom.	Med.	10-15	3.00	5.70	5.40	5.10

SPECIAL COLLECTIONS of GARDEN VARIETIES

Garden Varieties for Pot Plants

Consider the Garden Mums as spring pot plants. The collection described at the left consists of varieties particularly suited to spring pot plant forcing. The obvious selling point is that these flowering pot plants may be pinched back and planted outdoors for fall flowering in the garden.

See page 38 for complete directions for handling Garden varieties for May pot plants.

POT PLANT COLLECTION Special Offer No. 4

500 Rooted Cuttings for Mother's Day
Our Selection

Price, 500 cuttings.....\$25.00

See Next Page for Other Special Collections

Garden (HARDY) Varieties

Combination Offers

SPECIAL OFFER No. 1

500 rooted cuttings, our selection; 50 each of 10 taller varieties for cutting. \$25.00.

SPECIAL OFFER No. 2

500 rooted cuttings, our selection; 50 each of 10 medium to short varieties for pots or bedding. \$25.00.

SPECIAL OFFER No. 3

500 rooted cuttings, our selection; 50 each of 5 varieties for cutting, 50 each of 5 varieties for bedding. \$25.00.

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Chrysanthemum Culture

By Vic Ball

TRENDS

Like most everything else, ideas on Mum growing are changing—and fast. Highlights:

1. *Direct benching, rapid growth.* Growers are realizing the remarkably rapid headway a good soft cutting will make in good soil. Instead of 6-7 months, modern growers bench cuttings direct, grow single stemmed (no pinch)—and cut excellent pomps and Mums in as little as 90 days after planting (longer in winter).

2. *Single stemmed culture.* Doesn't pay always, but when close rotations are planned, the 3-4 weeks saved will easily pay added cutting cost, in better sprays and production, we find.

3. *Accurate scheduling of crops.* With tables available to growers today, it is possible to flower a crop of Mums or Pomps within 5-7 days of a predicted date *any week of the year*. Controlling day-length with light and shade is now a proven tool for growers. Controlled flowering date means controlled height—no more 6-7 ft. stems half of which are wasted effort.

4. *Varieties for each season.* Thanks to extensive testing and breeding work, there are available today specific variety recommendations for each color of Mums and Pomps for all seasons. Since varieties are at their best often for only a month or two out of the year, it is highly important to know which to use when.

5. *Spreading production.* Formerly the mum crop all flowered during October-November-December—too many flowers at once. We still have fall Mum gluts, but certainly the trend toward flowering more and more of the crop earlier (even in spring and early summer)—and later—is relieving the problem immensely.

GOOD MUM CULTURE

What's a Good Mum Soil?

It makes very little difference whether your soil is sandy or heavy, yellow or black. The tip-off in picking soils for greenhouse use: is it producing good stands of field crops? A soil



We are firm believers in annual steaming of our Mum soils—to stop verticillium (Seide-witz disease), stem rot, to control weeds, insects, and to improve "tilth" of soil.

that grows good corn or wheat will grow good Mums—if handled right. Of course, sandy soils need a lot more water and more frequent and heavier feeding.

Most any field soil will do a better job of growing if an inch of rotted cattle manure or of peat is plowed into it. If a soil seems "tight" and poorly aerated, and gives retarded, hard growth, add 2 inches of such material as peat. We have seen 2 inches of peat open a very heavy, tight soil so well as to grow excellent Mums. Where soils are used repeatedly, an inch, or better half an inch, of peat or manure can be added between each crop to advantage. Soils can be made sticky with too much peat!

Most soils will benefit by the addition of 5 lbs. per 100 sq. ft. of 20% superphosphate before each crop. It can do no harm. Beyond that, we add no fertilizers till the crop is in active growth.

Good drainage is essential—cracks in the bottom of benches that are open even when the boards are wet. On ground beds, where the sub-soil is heavy, one or two lines of 4 inch clay tile should be dug under each bed.

One or two cultivatings as the crop is starting into growth will help on soil aeration. It pays.

About sterilizing: we steam fresh field soils before using them. In general, where soil is used for Mums-Snaps-Stocks, etc., we try to steam once a year. We've seen Mums grown continuously for two years without steaming the soil. Of course, if soil-borne insects show up, they must be cooked. Likewise, if a lot of verticillium or stem rot appears on Mums, we would certainly steam before replanting to Mums. In other words, on all crops, we steam before planting if steaming will control a disease we have reason to expect trouble with.

We use the Thomas method (surface steaming) well described in a Cornell University Bulletin on the subject. Write the Dept. of Floriculture, Cornell University, Ithaca, New York. Soil must be heated to 180° for 30 minutes; on ground beds it should be heated to a depth of 8 inches to do a job. Some soils give "after sterilizing" troubles if planted immediately after steaming. Symptoms: retarded, slowed, yellowish growth, poor roots. Cure: a very heavy, thoro leaching (or two). Turning the soil with forks helps. Some schools recommend 4-5 lbs. per 100 sq. ft. of gypsum before planting. It could do no harm, and may help the soil recover from the "steaming miseries." Usually with a week or 10 days of leaching and waiting, you are safe. Some soils are OK the same day they are steamed.

Chemicals will kill soil insects, but are questionable in control of diseases.

A word about excess salts: Every so often a grower complains of a gradual hardening and yellowing of his Mums—"just won't grow" is the usual conclusion. A Solu-Bridge test in 20 minutes shows that there is a serious excess of *all salts* in his soil. How did it get that way? Well, a very hard water can contribute large amounts of sulfates, carbonates, calcium. A too-heavy fertilizing program will cause build-up of nitrates, potash, etc. Some soils are naturally "saline"—or loaded with salts. Some such soils can be cured by heavy and repeated leaching; others must be abandoned.

Bench a Good Cutting

Certainly good Mums can't be grown unless the cutting used is grade A in every respect. They often aren't. Here are some points we find important:

1. The cutting must be well rooted (roots an inch or so), but it must not be left in the sand too long. A week too long will harden and check it, and will surely give a slow starting plant.

2. The cutting should be fat and succulent, not thin, hard and wiry. The first several batches from a bed of stock make the best ones.

3. Cuttings must be free of disease and insects. Several important diseases are not apparent on the cutting. Good propagating specialists carry out programs of culturing and isolating their stocks against such diseases.

The great majority of growers today depend on such specialists for their cuttings. We recommend it.

About Insects and Diseases

As we see it, it's more a question of setting up good routine control programs that will eliminate the common insect-disease troubles. It has been our experience that application *every week* (every 2 weeks in winter) of a spray combining Parathion, and wettable sulfur with a spreader will eliminate most of the common Mum insect and disease problems. Addition of fermate helps on leaf spot. Here are dilutions:

Per 10 Gallons of Water

2½ ounces Parathion, 15% wettable powder.
2 ounces fermate.
3 ounces wettable sulfur powder
plus spreader.

The Parathion is the insecticide, and the most effective and versatile one we've ever used. It will give excellent control of the following pests if used regularly: red spider, aphis (green fly), midge, thrip, mealy bugs, tarnished plant bug, leaf tier, cut worm and leaf miner. It will also give excellent control of the leaf (foliar) nematode, since it penetrates the leaf tissue. It has a residual effect, making it effective for several days or more after spraying.

The fermate is an excellent general fungicide. Mainly for Mums, it is aimed at leaf spot (septoria).

Sulfur is particularly effective against mildew.

This can be used without injury to Mums at any period *except*—crops showing color or with open flowers, better use Dithiono in aerosol bombs in such cases.

Jobs the above spray *won't* do:

1. *Stunt*: a virus that results in dwarfing to about half normal stem length and flower size, and yellowing of flowers on bronze and pink varieties. Foliage is slightly lighter, duller green. Stunted plants flower noticeably earlier than plants not affected. Control involves an extremely tedious selection and isolation process which is being carried out most carefully by the specialist-propagators. Once a plant is infected, there is no control. Typical stunt affects a relatively

small percentage of a variety scattered at random thruout the bench. There is no drying or browning of foliage.

2. *Stem rot*: rotting off of plants at the soil surface—quite similar to the stem rot of Stocks. It appears only during the hot part of summer. Steaming of soil helps. Shallow planting of cuttings and keeping bench a little on the dry side till plants are established both help. Even during summer, a little "heat and air" at night will help. Benching a few extras permits replacement of casualties.

3. *Petal spotting*. Heat and air even during summer, especially at night when humidity is high, will help a lot. Flowers must be kept dry as they open. Parzate spray applied to the flowers weekly from the time color shows helps—be sure flowers dry off from spraying before nightfall. Worst on standards and especially Mefo and Betsy Ross. When shading during hot weather, drop sateen from 7 P.M. till 9 A.M. to avoid shading during afternoon heat. For more details, see GROWER TALKS, Sept. '50, page 20.

4. *Verticillium* (Seidewitz Disease). Causes browning, drying up of leaves. Main control: culturing of cuttings which is done by specialist propagators and steaming soil. Also, when this or other foliage diseases threaten, avoid wetting foliage.

Ed. Seidewitz, pink Mum, Yellow and White Shasta Pompoms are among the more susceptible varieties.

5. *Dodder*: There's nothing quite so bad once it gets started! It is a pale green parasite-vine that grows all over and between Mum foliage and stems. It fastens itself securely to the plant and sucks the life from it.

It is far cheaper to simply pull out and burn any infected plants. Do it promptly; it spreads very fast.

A word on aerosol bombs. They will get most insects, and they're labor savers. For the smaller miscellaneous grower, tho, there is a case for spraying, using the Parathion mixture described at left. Reasons:

1. At least in our experience, the temperature manipulation needed for good bombing encourages mildew. It's the temperature drop that's bad.

2. When you bomb, you bomb everything—including the Kalanchoe, the ferns and the proprietor's quarters, too, where they're connected to the greenhouses.

3. Bombs are not cheap. Much of what they save in labor, they lose you in cost of bombs, nozzles, protective clothes, etc.

4. Spraying, if done regularly, is absolutely effective.

5. (And most important). We would probably carry on a regular spray program with sulfur, fermate, etc. for diseases, so why not add Parathion powder and do the whole job at once? We do.

Miscellany

Let's include here the details of caring for the crop:

When to Bench? A good general rule is to bench cuttings three weeks prior to the date given in the catalog for pinching. Dates for benching of shaded and lighted crops are included in the schedules. Pinch once, on the date given in the catalog. If plants haven't made several inches of new succulent growth, wait till they have. Always pinch into soft growth.

Watering Mums. Once a Mum crop has really started to grow, it would be hard to overwater it, especially on raised benches. Dig down below the surface; take a handful of soil, wad it up. If, when you drop the ball, it breaks apart, the soil is ready for water.

Mums like and respond to a "wetting down" of the foliage on hot summer afternoons. Lay off, tho, if any leaf diseases appear.

Premature Budding. Occasionally a variety or two will go to bud shortly after benching, on worthless short stems. It is most likely to happen on cuttings received early (February-



These aerosol bombs are one excellent means of controlling insects; a regular spray program has its merits, too. Whichever you choose, some regular preventive program is a must for good Mums.



One very practical way to mechanize Mum watering. Such overhead lines as these with fishtail nozzles can be spaced every 15 feet; eliminate hand watering except on crops in flower.

March) and on the earlier flowering varieties. To prevent it:

1. Keep plants cool as possible, not over a 50° house.
2. Apply lights 2 hours nightly thru September, 3 hours thru October, 4 hours thru November, 5 hours thru December and January, 4 hours thru February, 3 hours thru March, and 2 hours thru April—starting the day you receive the cuttings.
3. Keep growth soft as possible—ample water, adequate feeding.

Worst varieties for early budding: Blazing Gold, Legal Tender, Masterpiece, Silver Sheen, Constellation, Seneca and the hardy varieties as a class.

The Feeding Program. In general, we apply no nitrate or potash either before benching or after till they have made several inches of new growth. Once they have started, we give them a light application of a balanced liquid fertilizer every several weeks in summer and fall, less often in dark weather. Sandy soils require more feeding. Occasional soil tests are of real help in use of fertilizers. We like to keep nitrates, potash, and phosphates all in the medium range.

About pH: slightly acid (pH 6.8) to neutral is about right for Mums in our experience. In applying sulfur sprays to the foliage, you will eventually get enough on the soil to start driving the pH down. Tests will show this, and it can be quickly corrected with lime.

Mulching Mums. Mums will respond very nicely to a half inch or so mulch of peat, especially during the warm months. It saves watering, seems to keep the surface soil from getting too hard. When the crop is out, you can plow this peat right into the soil where it will help the next crop, too.

"Taking" (or leaving!) the Bud—on Big Mums. In late summer you will find one of two types of growing tips on the plants:

1. CROWN. A flowering bud surrounded by non-flowering vegetative shoots.
2. TERMINAL. A flowering bud surrounded by flowering buds.

Early Mums will usually throw a crown bud in August. This is usually removed and one of the vegetative side shoots "selected" or left to grow on. All other shoots are removed. Some plants may produce another crown which may again be discarded in favor of a non-flowering shoot. Sooner or later, all plants produce a terminal from which you must select the best bud—to produce the flower.

On early varieties it's safest to remove all crowns up to August 20. Early crowns are O.K. on some shaded Mums. On

mid-season sorts, terminals are safer. Final bud should have been selected by September 1-10; on late ones a month later. Your experience is the best guide. Keep notes.

On single stemmed or unpinched crops of standard (big) Mums, always leave the center one of the first cluster of buds to appear. If the side buds surrounding this bud are not removed promptly, they will rapidly grow beyond the center bud. You will then have to leave one of the stronger side buds and remove the center one—and you will have a "dog leg" stem. Unpinched Mum crops must be checked over twice a week without fail to avoid this loss.

Cutting the flowers. One big point: start as the bench is just a bit on the too green side, and cut regularly every day *so that the whole bench will be off before any part of it is old.* Old or pickled flowers will be older yet when they reach the market—worth little or nothing.

Spacing—crops that are to be pinched (both Mums and Poms) are normally spaced 7 x 8 or near to that. On this spacing, Poms are usually pruned to leave the three strongest stems, big Mums the best two (or three depending on your market).

Supports—Why Three When One Does It? Years ago, the style was to grow Mums or Poms 4-6 ft. tall or more and provide 2, 3 or even 4 layers of wire and cross strings. Mums were strung individually to an over-head wire—or staked.

We find it perfectly practical, and a great economy in time and material, to support both Mums and Poms with a single layer of wire-string. This assumes proper scheduling of the crop so that it will not exceed 3-3½ ft. in height. It also requires that this one layer of wire-string be capable of being raised weekly as the crop grows. If the plant is anchored at the ground, and at its top, what can it do but stand up straight?

The end supports on our beds are of inch pipe. The intermediate supports on down the bench are spaced every 17 ft.; uprights are 1 x 2 and cross members are 1 x 1. Wires are stapled down to the 1 x 1. The 1 x 1 is fastened to the upright 1 x 2 by tying it with binder twine. To insure against it's slipping down, we drive a 2" nail below the 1 x 1 and only part way in so it can be raised weekly. See photo on next page.

In our early trials with this one layer support idea, we had one fine bench of Illini Snowdrift that tipped over on its side! Since then we have strengthened the supports, put them closer—and had no further trouble. By the way, we got the Snowdrift back up on its feet without any serious injury.



Liquid feeding seems to give better response than the same material applied dry. Weak but regular applications can be made as you water (without loss of pressure) with the Smith pump (above) or the Delta dispenser.



One layer of wire-strings should handle Mums or Pomps—if moved up regularly. We handle this by tying the cross-piece, then driving a 2-inch nail just below it to prevent slipping down. Mr. W. A. Botkin of Plain City, Ohio, in the photo.

Best Temperatures: During firing season, normal flowering fall Mums have always been considered a 50 degree (nights) crop—58 cloudy day, 65 sunny day. For no-shade, no-light crops that flower up to December this 50 degrees will do, since bud setting takes place during the warmer days of August-early September. However, even normal flowering date crops that flower during December-early January had better be carried at least 55 until buds are in sight; otherwise some blindness may occur. Many a bed of Garza has turned out $\frac{1}{4}$ blind—too cold.

Growers on tight 3-crops-a-year-schedule carry 60 degrees minimum thruout the year to insure bud set, and to be sure buds will develop and open timely so as not to delay the next crop. See page 30 for details.

THE CLOTH HOUSE PROGRAM

It has been our experience that, with careful culture, Pomps flowered outdoors under cloth during August-September are clearly superior to those grown under glass at that time. We're talking about Midwest and Eastern areas now.

Of course, our late summer markets are always generously supplied with what are tagged "outdoor" Pomps—hard stems, dried up foliage, and poor, dirty flowers. However, the much cooler temperatures, especially at night, and the ample fresh outdoor air, if combined with careful growing, are substantial advantages to outdoor growing over hot greenhouses. Certainly costs are lower. Fading of colors is much less of a problem outdoors.

Cloth house Pomps can be flowered all the way from early July till well into October. The early July crop is produced by benching a $2\frac{1}{2}$ inch banded plant outdoors May 1, protecting it from early frost with sateen cover and a steam pipe if necessary. Cuttings should be banded about 30 days before benching date. Single stemmed culture is followed. Pomps may be flowered to mid-October by the same combination of sateen and heat. The regular "off-season" timing schedules (page 32) are used to plan cloth house crops.

Since almost no quality cut flower varieties normally flower before frost date, most growers of cloth house crops use later varieties shaded with black sateen.

Large flowering standards are occasionally grown under cloth, but due to petal rot are a definite gamble. Hard varieties are best—Good News, Detroit News, Blazing Gold. By careful selection of varieties, excellent pot Mums may be grown under cloth.

Cloth house Pomps are grown over most of the United States—heaviest in the Midwest, East and California. In almost any location, Aster cloth (or Seran) protection is a "must" for quality.

The Disease Problem

Because rains keep foliage wet, and tend also to spread disease spores (through splashing), such problems as Verticillium, Septoria, and Mildew are more serious outdoors than under glass. Insects tend to be more troublesome, too, because there is no glass barrier to keep them from blowing into the beds. It all adds up to an even more thorough preventive program.

First, disease-free cuttings are a must—especially must they be cultured against Verticillium. Second, if at all possible, soil should be steamed. As a second choice, don't grow Pomps too many seasons on the same land. Third, if foliage diseases are giving trouble, carefully avoid wetting foliage while you water—rains will wet it enough!

And lastly: A regular weekly spray program to include Parathion, Fermate, Sulfur, and a spreader. See page 27. Kept up weekly, this will go a long way to keep cloth house Pomps clean.

Quite a few cloth house growers are turning to plastics such as Seran in place of Aster cloth. The 20 threads per inch grade of Seran clear, not green, will grow good Pomps. It is not as effective an insect barrier as the 20 thread per inch cotton—lacks the fuzziness. But in a Mum house where regular spraying is kept up, the insect problem shouldn't be serious. Seran will last 3 to 5 years or more, so is an economy in the long run.

Heated Cloth Houses

Because we have "cool summers" every several years, and because low July-August temperatures delay and interfere with bud setting, several growers are running a few heat lines through their cloth houses. Every several seasons we hear of a lot of cloth house Pomps that set bud, then start in vegetative growth again, and in other ways produce defective sprays. Certainly the grower equipped to keep at least 55 degrees and preferably 60 degrees in his cloth house is going to get a more uniform product over the years.

When such heat is used under cloth, the black sateen is rolled down to keep the heat down on the plants.

Schedules and Varieties for Cloth House

The regular Off-Season Mum schedules that start on page 32 may be used for timing cloth house crops. The schedules for late July, August, and September flowerings are on page 36.

Not all varieties stand cloth house conditions. The following are recommended for late July, August and up to the September 28 flowering:

White: Shasta 10W
Dynamo 10W
White Popcorn 9W
Keepsake 9W
P'nocchio 9W
*Encore 10W
Snowdrift 10W

Yellow: Mary L. Hall 10W
Yellow Shasta 10W
Gold Coast 9W
Golden Herald 9W
Sunup 9W
Schneeburg's Daisy 9W

*For single stemmed culture, bench cuttings 1 to 2 weeks before shading.
For pinched crop, shade 1-2 weeks after pinch.

Bronze: Beauregard 10W
Chevron 10W
Paragon 10W
Buckskin 10W

Pink: Reward 9W
Jessie 9W
Pink Dot 9W
Pandora 10W
Linda Lou 10W
Memorial 10W

For flowering Sept. 28 or later under cloth all the 10 week (10W) varieties above may be used—plus the following:

White: Belray 11W
Highbrow 11W
Crystal Beauty 11W
Sculpture 11W

Yellow: Golden Chord 11W
Lollipop 11W
Klondike 11W

Bronze: Thelma 11W
Rusticon 11W
Bronze Minuet 11W

Pink: Grand Slam 11W
Pinky 11W
Minuet 11W

OFF-SEASON MUMS

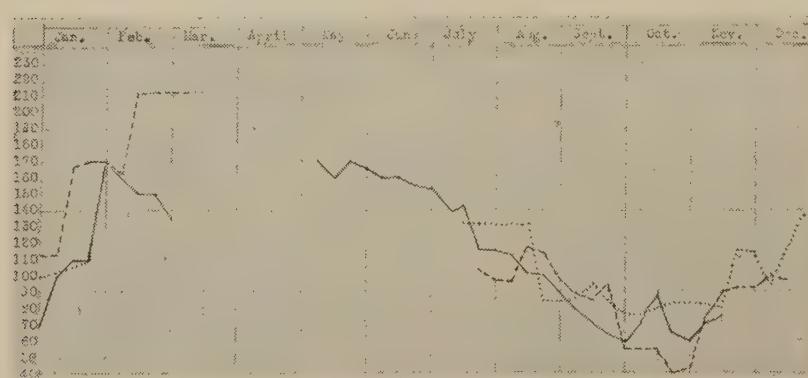
Years ago, Mums were flowered only during late fall—"normal season." In the thirties black cloth shading came into commercial practice—and good Mums came onto the markets during September and early October. The past five years have seen large scale use of lighting and now Mums are becoming an accepted spring and early summer flower—and even winter too.

Why have growers been so anxious to extend the Mum season? The accompanying graph of average Pomp prices through the year tells most of the story, Mums have been in ample supply—sometimes surplus during the fall, but have been in demand and at good prices during spring and summer and even September. Furthermore, retailers like spring and summer Mums well because they will keep (often two weeks)—and because of the wide variety in color and form they provide. A Gladiolus is a "Glad"—different colors, yes. But consider the endless variety in Mums—from tiny white Pinocchio to giant 6-7 inch Mefo's—and the delicate spiders such as Queen's Lace that are enjoying so much popularity!

Off-season flowering is no more difficult than many other cut flower crops. The rules are well defined. To succeed, the grower must, however, be prepared to provide the temperatures, accurate day length control (shade and lights), and will do best by staying close to prescribed varieties at least until he has had some experience. Note, too, that all these schedules are based on *rapid, unchecked growth*—good porous soil must be provided, plants must be well watered, fed regularly, kept free of insects and diseases. And remember, no Mum crop can succeed unless good, soft, clean, well-rooted cuttings are used.

Off-Season Temperatures

Temperatures for winter and spring flowering must be considered by growth periods:



A mighty convincing argument in favor of winter, spring, and summer Poms and Mums. 1948 is the dotted line, '49 the dashes, 1950 the solid line. Source, our own returns, quoted prices in the FLORIST'S REVIEW.

1. *From benching till you start short days (lights off or start shading date)*; A 60° minimum is best; 55° will do, but at 50° nights, growth will be slowed and stems too short on these schedules.

2. *Bud formation period*—starting with "lights off" or the "start shading" date and until buds are definitely formed (Poms should show color). Temperature thru this period must not be below 60°. At 55° nights some varieties will be more or less blind; also at lower temperatures you will get fewer florets per spray.

3. *After buds form, and until flowers are cut*: crops that are flowered in the winter period (Mid-December to March) are apt to be soft and of poor quality unless dropped gradually to 55 or 50 degrees as soon as color shows. This depends some on amount of sun—the more sun, the higher the temperature which may be carried. Normally late varieties like Cameo and Vibrant can be finished at higher temperatures than earlier ones like Gold Coast.

"50 degrees" here means 50 degrees at night, 58 on cloudy days, 65 on sunny days. A 60 degree house should be 65 on cloudy days, 72 on sunny days.

4. *The miscellaneous grower*—planning only a bed or two of off-season Poms in his 50° house—can't provide these carefully adjusted temperatures. We have seen good Poms finished all the way from Easter till summer in 50° houses. If cuttings are benched a week or two early it will offset the short stem problem. During actual bud formation, the 60° temperature is provided at night by covering the bed with black sateen cloth and turning pipes on below it. Rather questionable for crops flowered between January and April. Worth noting here: growers not experienced with off-season Mums will find the spring and early summer an excellent time to try first. For many reasons, they are easier to flower thru May, June and July than they are in January-February-March. And June Poms have so far brought fair returns.

Which Varieties?

As any grower knows, the more of any one variety that is produced in a given week, the less it will bring per bunch. Splitting your planting up among more varieties is more trouble, and means growing some that may not seem perfect to you—but it will pay in \$\$\$ returns.

The problem then, is to find enough suitable varieties for each flowering period. With this problem in mind, we have tried to broaden the number of varieties recommended in each period and for each color. We urge growers to at least try out a wider number of varieties—you will always find some better than others, and very likely your choice of best in each color may not agree with our experience.

Correct Spacing of Plants

First, for pinched crops: both Standards and Poms, 7 x 8 or 8 x 8 inches is about it, with perhaps some allowance for varieties as you get to know them. For single stemmed (no pinch) growing, we find 5 x 6 inches close enough for both Poms and Standards. Some growers follow the idea of closer spacing during summer (4 x 7, or even 4 x 6 for Poms), and farther apart during winter flowering (6 x 6 for Poms). As we see it, there's just as good a case for a uniform 5 x 6 inch spacing thru the year.

Percentages of Colors

What percentage of a given crop should be white? yellow? Also what percent should be in Standards and what percent in Poms? The answer depends on your local market or demand

of your store, if you are a retail grower. Here are the percentages we use for the Chicago market:

Percentage of Poms and Standards—by Flowering Periods

	Jan.	Feb.	March	April	May	June	July-Aug.	Sept.-Oct.	Nov.-Dec.
% Poms	90	90	75	75	70	80	60	60	
% Standards	10	10	25	25	30	20	40	40	

Color Percentages of Poms—by Flowering Periods

	Jan.	Feb.	March	April	May	June	July-Aug.	Sept.-Oct.	Nov.	Dec.
% White	40	40	50	60	40	30	20	35		
% Yellow	35	40	35	30	40	40	40	40	20	
% Pink	15	10	15	10	10	10	10	10	10	
% Bronze	10	10	—	—	10	20	30	35		

Color Percentages of Standards (Mums) by periods

	Jan.	Feb.	March	April-May	June	July-Aug.	Sept.-Oct.	Nov.	Dec.
% White	50	50	50	60	35	35	30	40	
% Yellow	40	40	40	30	40	40	35	20	
% Pink	10	10	10	10	—	—	10	10	
% Bronze	—	—	—	—	25	25	25	30	

About Single Stemmed Mums

Each of the schedules gives dates for both pinched and unpinched culture. Why single stemmed Mums?

After several season's experience with unpinched crops, we believe that, while there is added cost of cuttings because of the closer spacing, there are advantages that more than offset this cost—on *some* crops. First, you save 3-5 weeks' time by eliminating the pinch. Production seems generally some better; sprays seem to form up better, especially in winter and spring.

A good example: cloth house Poms if pinched can't be flowered before Labor Day. A single stemmed crop planted May 7 flowers August 7—and on our market last year they brought 30c per bunch more than in September. Where you are figuring a tight rotation in the greenhouse this saving of 3-5 weeks might mean getting an extra crop in. Single stemmed culture is a must on 3-crops-a-year Mum growing.

Where standards (big Mums) are grown single stemmed, in practically all cases, the first center bud that appears should be left on and allowed to develop. Removal of side buds must be done before they over-grow the center bud!

Try it!

Lighting Details

The purpose of lights on winter crops is to delay bud formation till sufficient stem has developed. If you are getting premature bud formation at the corners (farthest away from the bulbs), your light intensity is too low. Best way is to check with a light meter—can be borrowed from your Public Service Company or electrical contractor. 10 foot candles minimum is ample, we shoot for at least 7 all over; one large grower works on an absolute minimum of 5.

For single 4 ft. beds, one string of 60 watt bulbs with reflectors spaced 4 ft. apart and 3 ft. above plant tops is adequate. Where two beds are to be lighted together, one string of 100 watt bulbs with reflectors does it. A string of 150 watt bulbs will handle three 3½ ft. beds for us.

To reduce sizes of electric mains, the area to be lighted can be split in half. The first half is lighted the required number of hours before midnight; the second half gets the same number of hours light after midnight. Also 230 volt lines will help reduce main sizes on some installations. Consult your electrician.

Some growers fasten 150 watt or larger "self reflector" bulbs to the roof of the houses, lighting the entire house.

When to Stop Lighting—and Shading

Following are safe dates for Middle West and East:

- Where long days are required, continue lights in spring



Lights! The real test of adequate light intensity is the plants' behavior—if you see premature buds appearing around the poorer lighted corners, and between bulbs, that means more foot candles are needed.

until May 1. Start lights in fall on August 1.

2. Where short days are required, start applying cloth February 15 on late varieties if not already in full bud; March 15 for early kinds.

Stop shading October 5 on late varieties; September 10 on early ones.

Ken Post of Cornell points out the importance of temperatures here. If 60° is strictly maintained he finds no shade needed between September 20 and April 1.

Attention Southern Growers

The off-season schedules and variety lists that follow were worked out for midwest and eastern conditions. Growers located more than 300-350 miles north or south of the Chicago latitude will find dates and varieties not always suitable. Write for special schedules for your latitude.

Round the Clock Mums

Three crops a year on one bench are being produced by quite a few Mum growers around the United States and Canada. That's a story in itself! Write us for our three-crops a-year program.

About Spray Formation

Some varieties during certain winter periods tend toward a clubby, tight spray. To some extent this is a question of varieties; avoid those that make poor sprays. In general, the normally late varieties make better sprays for January-February-March flowering than will the earlier kinds.

Also, many growers reduce the period of light to 1 hour during the last one-third of the lighting period to improve spray form. For example, on the crop to flower January 17, lights would be turned on only 1 hour nightly from September 26 to October 11.

Unchecked, Rapid Growth

These schedules are all based on a rapid, unchecked growth. You should realize 8-10 inches of new growth on a cutting within 30 days of benching. If you aren't getting it, here are things to look for:

- Poorly rooted, hard cuttings; too long in the sand.
- Tight soil; poorly drained and aerated. Add peat or manure.
- Nutrient deficiency—lack of nitrates, potash or phosphate.
- Too cold—they grow much faster at 60° than at 45°!
- Too dry—soil must be kept uniformly moist.
- Bugs.

Some growers are concerned that such soft, rapid growth will result in soft stems and flowers—as would certainly be the case with a bed of Snaps. Mums are a different animal. They like the heat.

OFF-SEASON MUM SCHEDULE

Response groups. You will note a "9W" or "10W" after each variety in these tables. This refers to the number of weeks the variety requires between start shading and flowering dates (or between "lights off" and flowering in winter). Some kinds take as little as 7 weeks, some as long as 14. Obviously, in order to flower a bed of Mums together from the same shading date, varieties of about the same response group must be selected. Varieties with *early normal* flowering dates are the 7, 8, or 9 week kinds; those with *late normal* flowering dates are 12, 13 or 14 weeks kinds.

Crops to flower in winter do best if 12, 13 and 14 week kinds are used; those to flower in summer do best with 9 and 10 week varieties. Selection of appropriate classes of varieties for each season has been given the most careful attention in preparing these tables. In a few cases, varieties are included which would not normally belong in the group (10 week variety in 14 week group). These few have been tried by us and altho they may flower on shorter stems, are worth while in our opinion.

TO FLOWER DECEMBER 26

	Pinched Crop	Single Stemmed Unpinched Crop
PLANT CUTTINGS	July 25	Aug. 22
PINCH	Aug. 22	No pinch
LIGHT PLANTS	Aug. 1-Sept. 1 2 hrs. nightly	Aug. 22-Sept. 1 2 hrs. nightly
	Sept. 1-19 3 hrs. nightly	Sept. 1-19 3 hrs. nightly
SHADE	Sept. 19	Sept. 19
(14 Week schedule)		

VARIETIES (Pompons)

WHITE	*Cameo 13W Snowcrest 14W heavy production	YELLOW	*Shamrock 14W *Vibrant 14W *Corsair 13W Yellow Cameo 13W Yellow Snow 14W
	*Silversmith 14W Revelation 14W Snow 14W		*Jackpot 13W Yellow Snowcrest 14W, very productive
	Acclaim 13W Snowcap 14W Must be finished at 60° to be clear white.		
PINK	*Riviera 14W Debutante 13W Medallion 14W	BRONZE	*Bronze Riviera 14W Christmas Greeting 14W Copperhead 10W Short, but nice color.

Special Schedule for Standards

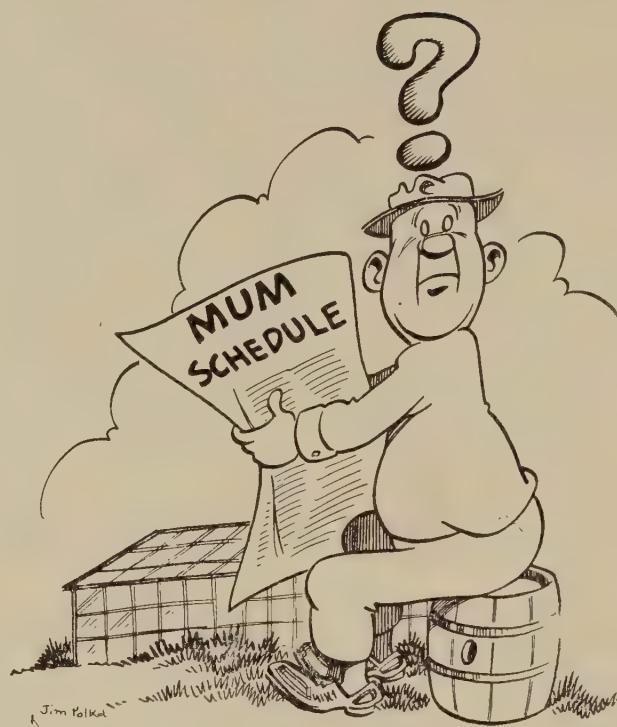
To Flower December 26

	Pinched Crop	Single Stemmed Unpinched Crop
PLANT CUTTINGS	July 25	Aug. 22
PINCH	Aug. 22	No pinch
LIGHT PLANTS	Aug. 1-Sept. 1 2 hrs. nightly	Aug. 22-Sept. 1 2 hrs. nightly
	Sept. 1-Oct. 17 3 hrs. nightly	Sept. 1-Oct. 17 3 hrs. nightly
SHADE	No shade	No shade
(10 week schedule)		

VARIETIES (Standards)

WHITE	*Ind. White 10W Mefo 11W Queen's Lace 9W	YELLOW	*Ind. Yellow 10W Yellow Mefo 11W Yellow Lace 9W
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*Preferred varieties.



TO FLOWER JANUARY 17

	Pinched Crop	Single Stemmed Unpinched Crop
PLANT CUTTINGS	Aug. 9	Sept. 6
PINCH	Sept. 6	No pinch
LIGHT PLANTS	Aug. 9-Sept. 1 2 hrs. nightly	Sept. 6-Oct. 11 3 hrs. nightly
	Sept. 1-Oct. 11 3 hrs. nightly	
SHADE	No shade	No shade
(14 Week schedule)		

VARIETIES (Pompons)

Use Pompon varieties recommended to flower December 26. For Standards at this period, use following schedule and variety list.

Special Schedule for Standards

To Flower January 17

	Pinched Crop	Single Stemmed Unpinched Crop
PLANT CUTTINGS	Aug. 9	Sept. 6
PINCH	Sept. 6	No pinch
LIGHT PLANTS	Aug. 9-Sept. 1 2 hrs. nightly	Sept. 6-Nov. 1 3 hrs. nightly
	Sept. 1-Nov. 1 3 hrs. nightly	Nov. 1-Nov. 8 4 hrs. nightly
SHADE	No shade	No shade
(10 Week schedule)		

VARIETIES (Standards)

Only 9 and 10 week varieties should be used with the above schedule.

WHITE	*Ind. White 10W Mefo 11W Queen's Lace 9W	YELLOW	*Ind. Yellow 10W Yellow Mefo 11W Yellow Lace 9W
PINK	*Ind. Pink 10W Orchid Queen 10W Mary Garden 9W	BRONZE	Ind. Bronze 10W

TO FLOWER FEBRUARY 5

	Pinched Crop	Single Stemmed Unpinched Crop
PLANT CUTTINGS	Aug. 28	
PINCH	Sept. 25	No pinch
LIGHT PLANTS	Aug. 28-Sept. 1 2 hrs. nightly	Sept. 25-Oct. 30 3 hrs. nightly
	Sept. 1-Oct. 30 3 hrs. nightly	
SHADE (14 Week schedule)	No shade	No shade

VARIETIES (Pompons)

Use Pompon varieties recommended to flower December 26. For Standards at this period, use following schedule and variety list.

Special Schedule for Standards

To Flower February 5

	Pinched Crop	Single Stemmed Unpinched Crop
PLANT CUTTINGS	Aug. 28	Sept. 25
PINCH	Sept. 25	No pinch
LIGHT PLANTS	Aug. 28-Sept. 1 2 hrs. nightly	Sept. 25-Nov. 1 3 hrs. nightly
	Sept. 1-Nov. 1 3 hrs. nightly	Nov. 1-27 4 hrs. nightly
	Nov. 1-27 4 hrs. nightly	
SHADE (10 Week schedule)	No shade	No shade

VARIETIES (Standards)

Only 9 and 10 week varieties should be used with the above schedule.

WHITE	*Ind. White 10W Mefo 11W Queen's Lace 9W	YELLOW	*Ind. Yellow 10W Yellow Mefo 11W Yellow Lace 9W
PINK	*Ind. Pink 10W Orchid Queen 10W Mary Garden 9W	BRONZE	Ind. Bronze 10W

TO FLOWER FEBRUARY 24

	Pinched Crop	Single Stemmed Unpinched Crop
PLANT CUTTINGS	Sept. 16	Oct. 14
PINCH	Oct. 14	No pinch
LIGHT PLANTS	Sept. 16-Nov. 1 3 hrs. nightly	Oct. 14-Nov. 1 3 hrs. nightly
	Nov. 1-18 4 hrs. nightly	Nov. 1-18 4 hrs. nightly
SHADE (14 Week schedule)	No shade	No shade

VARIETIES (Pompons)

Use Pompon varieties recommended to flower December 26. For Standards at this period, use following schedule and variety list.

Special Schedule for Standards

To Flower February 24

	Pinched Crop	Single Stemmed Unpinched Crop
PLANT CUTTINGS	Sept. 16	Oct. 14
PINCH	Oct. 14	No pinch
LIGHT PLANTS	Sept. 16-Nov. 1 3 hrs. nightly	Oct. 14-30 3 hrs. nightly
	Nov. 1-30 4 hrs. nightly	Nov. 1-30 4 hrs. nightly
	Dec. 1-16 5 hrs. nightly	Dec. 1-16 5 hrs. nightly
SHADE (10 Week schedule)	No shade	No shade

*Preferred varieties.

VARIETIES (Standards)

Only 9 and 10 week varieties should be used with the above schedule.

WHITE	*Ind. White 10W Mefo 11W Queen's Lace 9W	YELLOW	*Ind. Yellow 10W Yellow Mefo 11W Yellow Lace 9W
PINK	*Ind. Pink 10W Orchid Queen 10W Mary Garden 9W	BRONZE	Ind. Bronze 10W

TO FLOWER MARCH 5

	Pinched Crop	Single Stemmed Unpinched Crop
PLANT CUTTINGS	Sept. 25	Oct. 23
PINCH	Oct. 23	No pinch
LIGHT PLANTS	Sept. 25-Nov. 1 3 hrs. nightly	Oct. 23-30 3 hrs. nightly
	Nov. 1-30 4 hrs. nightly	Nov. 1-30 4 hrs. nightly
SHADE (13 Week schedule)	No shade	No shade

VARIETIES (Pompons)

Only 12 and 13 week varieties should be used with the above schedule.

WHITE	*Cameo 13W *Belray 12W Acclaim 13W Cotillion 13W	YELLOW	Cinderella 13W Goldsmith 12W *Corsair 13W Omega 12W Jackpot 13W *Yellow Cameo 13W
PINK	Debutante 13W	BRONZE	Galaxy 12W Indian Head 12W Copperhead 10W Apr. Valencia 12W Br. Goldsmith 12W

Special Schedule for Standards

To Flower March 5

	Pinched Crop	Single Stemmed Unpinched Crop
PLANT CUTTINGS	Sept. 25	Oct. 23
PINCH	Oct. 23	No pinch
LIGHT PLANTS	Sept. 25-Nov. 1 3 hrs. nightly	Oct. 23-30 3 hrs. nightly
	Nov. 1-30 4 hrs. nightly	Nov. 1-30 4 hrs. nightly
SHADE (10 Week schedule)	No shade	No shade

VARIETIES (Standards)

Only 9 and 10 week varieties should be used with the above schedule.

WHITE	*Ind. White 10W Mefo 11W Queen's Lace 9W	YELLOW	*Ind. Yellow 10W Yellow Mefo 11W Yellow Lace 9W
PINK	*Ind. Pink 10W Orchid Queen 10W Mary Garden 9W	BRONZE	Ind. Bronze 10W

TO FLOWER MARCH 14

	Pinched Crop	Single Stemmed Unpinched Crop
PLANT CUTTINGS	Oct. 4	Nov. 1
PINCH	Nov. 1	No pinch

LIGHT PLANTS

Oct. 4-30	Nov. 1-30
3 hrs. nightly	4 hrs. nightly
Nov. 1-30	Dec. 1-13
4 hrs. nightly	5 hrs. nightly
Dec. 1-13	
5 hrs. nightly	

SHADE
(13 Week schedule)

No shade	No shade
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VARIETIES (Pompons)

Use Pompon varieties recommended to flower March 5. For Standards at this period, use following schedule and variety list.

Special Schedule for Standards

To Flower March 14

Pinched Crop

Oct. 4	Single Stemmed Unpinched Crop
Nov. 1	Nov. 1
Oct. 4-Nov. 1	No pinch
3 hrs. nightly	Nov. 1-30
Nov. 1-30	4 hrs. nightly
4 hrs. nightly	Dec. 1-Jan. 3
Dec. 1-Jan. 3	5 hrs. nightly
5 hrs. nightly	

SHADE
(10 Week schedule)

No shade	No shade
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VARIETIES (Standards)

Only 9 and 10 week varieties should be used with the above schedule.

WHITE *Ind. White 10W

YELLOW *Ind. Yellow 10W

Mefo 11W

Yellow Lace 9W

Queen's Lace 9W

Yellow Mefo 11W

PINK *Ind. Pink 10W

BRONZE

Orchid Queen 10W

Ind. Bronze 10W

Mary Garden 9W

TO FLOWER APRIL 7

Pinched Crop

PLANT CUTTINGS	Nov. 4	Single Stemmed Unpinched Crop
PINCH	Dec. 2	Dec. 2
LIGHT PLANTS	Nov. 4-30	No pinch
	4 hrs. nightly	Dec. 2-Jan. 20
	Dec. 1-Jan. 20	5 hrs. nightly
	5 hrs. nightly	
SHADE (11 Week schedule)	Shade Feb. 15 if buds not formed	Shade Feb. 15 if buds not formed

VARIETIES (Pompons)

Only 10 and 11 week varieties should be used with the above schedule.

WHITE *Shasta 10W

YELLOW

Lollipop 11W

*Halo 9W

*Yellow Shasta 10W

White Mensa 10W

Pippin 11W

Sculpture 11W

*Mary L. Hall 9W

Highbrow 11W

Golden Mensa 10W

Lakme 11W

Bojangles 11W

Dynamo 10W

BRONZE

PINK	Masterpiece 10W	*Br. Linda Lou 10W
	*Linda Lou 10W	*Beauregard 10W
	Majorette 11W	
	*Grand Slam 11W	
	Memorial 10W	
	Minuet 11W	

VARIETIES (Standards)

WHITE *Ind. White 10W	YELLOW *Ind. Yellow 10W
Mefo 11W	Yellow Queen 10W
Queen's Lace 9W	Yellow Mefo 11W
	Yellow Lace 9W

PINK	Dk. Orchid Queen 10W
	*Ind. Pink 10W
	Mary Garden 9W

*Preferred varieties.

TO FLOWER APRIL 23

Pinched Crop

PLANT CUTTINGS	Nov. 20	Single Stemmed Unpinched Crop
PINCH	Dec. 25	Dec. 25
LIGHT PLANTS	Nov. 20-30	No pinch
	4 hrs. nightly	Dec. 25-Feb. 1
	Dec. 1-Feb. 1	5 hrs. nightly
	5 hrs. nightly	Feb. 1-5
	4 hrs. nightly	4 hrs. nightly
SHADE (11 Week schedule)	Feb. 15 if no buds	Feb. 15 if no buds

VARIETIES (Pompons)

Use Pompon varieties recommended to flower April 7. For Standards at this period, use following schedule and variety list.

Special Schedule for Standards

To Flower April 23

Pinched Crop

PLANT CUTTINGS	Nov. 20	Single Stemmed Unpinched Crop
PINCH	Dec. 25	Dec. 25
LIGHT PLANTS	Nov. 20-30	No pinch
	4 hrs. nightly	Dec. 25-Jan. 31
	5 hrs. nightly	5 hrs. nightly
	4 hrs. nightly	Feb. 1-12
SHADE (10 Week schedule)	Feb. 15 if no buds	4 hrs. nightly
		Feb. 15 if no buds

VARIETIES (Standards)

Only 9 and 10 week varieties should be used with the above schedule.

WHITE *Ind. White 10W

YELLOW *Ind. Yellow 10W

Mefo 11W

Yellow Queen 10W

Queen's Lace 9W

Yellow Lace 9W

Yellow Mefo 11W

PINK *Ind. Pink 10W

Dk. Orchid Queen 10W

Mary Garden 9W

TO FLOWER MAY 9

Pinched Crop

PLANT CUTTINGS	Dec. 13	Single Stemmed Unpinched Crop
PINCH	Jan. 18	Jan. 18
LIGHT PLANTS	Dec. 13-Jan. 30	No pinch
	5 hrs. nightly	Jan. 18-30
	Feb. 1-28	5 hrs. nightly
SHADE (10 Week schedule)	Feb. 28	Feb. 1-28
		4 hrs. nightly
		Feb. 28

VARIETIES (Pompons)

Only 9 and 10 week varieties should be used with the above schedule.

WHITE *Shasta 10W

YELLOW *Mary L. Hall 9W

*Halo 9W

Yellow Shasta 10W

White Mensa 10W

*Schneeburg's Daisy

Pinocchio 9W

9W

I. Snowdrift 10W

Keepsake 9W

PINK Masterpiece 10W

BRONZE *Beauregard 10W

*Linda Lou 10W

Copperhead 10W

Soprano 10W

Dk. Br. Masterpiece

10W

*Paragon 10W

VARIETIES (Standards)

WHITE *Ind. White 10W
Mefo 11W
*Queen's Lace 9W

PINK *Ind. Pink 10W
Dk. Orchid Queen 10W
Mary Garden 9W

YELLOW *Ind. Yellow 10W
Yellow Mefo 11W
*Yellow Lace 9W

TO FLOWER MAY 23

	Pinched Crop
PLANT CUTTINGS	Jan. 4
PINCH	Feb. 8
LIGHT PLANTS	Jan. 4-31 5 hrs. nightly Feb. 1-29 4 hrs. nightly March 1-14 3 hrs. nightly
SHADE (10 Week schedule)	March 14

**Single Stemmed
Unpinched Crop**

Feb. 8
No pinch
Feb. 8-29
4 hrs. nightly
March 1-14
3 hrs. nightly

March 14

VARIETIES (Pompons and Standards)

Use varieties recommended to flower May 9.

TO FLOWER JUNE 3

	Pinched Crop
PLANT CUTTINGS	Jan. 22
PINCH	Feb. 26
LIGHT PLANTS	Jan. 22-30 5 hrs. nightly Feb. 1-29 4 hrs. nightly March 1-25 3 hrs. nightly
SHADE (10 Week schedule)	March 25

**Single Stemmed
Unpinched Crop**

Feb. 26
No pinch
Feb. 26-29
4 hrs. nightly
March 1-25
3 hrs. nightly

March 25

VARIETIES (Pompons and Standards)

Use varieties recommended to flower May 9.

TO FLOWER JUNE 14

	Pinched Crop
PLANT CUTTINGS	Feb. 15
PINCH	March 15
LIGHT PLANTS	Feb. 15-29 4 hrs. nightly March 1-31 3 hrs. nightly
SHADE (10 Week schedule)	April 1-5 2 hrs. nightly

**Single Stemmed
Unpinched Crop**

March 15
No pinch
March 15-31
3 hrs. nightly

April 1-5
2 hrs. nightly

April 5

VARIETIES (Pompons)

Only 9 and 10 week varieties should be used with the above schedule.

WHITE *Shasta 10W
*Halo 9W
Pinocchio 9W
*I. Snowdrift 10W
White Mensa 10W
Keepsake 9W
*White Popcorn 9W

PINK Reward 9W
*Linda Lou 10W
Pandora 10W

YELLOW *Mary L. Hall 9W
*Yellow Shasta 10W
Schneeburg's Daisy 9W
Golden Herald 9W
Gold Coast 9W
Pixie 10W

BRONZE *Beauregard 10W
Paragon 10W

VARIETIES (Standards)

WHITE Mefo 11W
Betsy Ross 10W
*Queen's Lace 9W
Silver Sheen 8W,
will flower early
and short but
spreads cut period

PINK Pink Chief 8W,
not dependable
Mary Garden 9W

YELLOW Yellow Mefo 11W
Good News 9W
*Yellow Lace 9W

TO FLOWER JUNE 20

	Pinched Crop
PLANT CUTTINGS	Feb. 21
PINCH	March 21
LIGHT PLANTS	Feb. 21-29 4 hrs. nightly
SHADE (10 Week schedule)	March 1-31 3 hrs. nightly
SHADE (10 Week schedule)	April 1-11 2 hrs. nightly

**Single Stemmed
Unpinched Crop**

March 21
No pinch
March 21-31
3 hrs. nightly
April 1-11
2 hrs. nightly

April 11

VARIETIES (Pompons and Standards)

Use varieties recommended to flower June 14.

TO FLOWER JUNE 27

	Pinched Crop
PLANT CUTTINGS	Feb. 28
PINCH	March 28
LIGHT PLANTS	Feb. 28-29 4 hrs. nightly
SHADE (10 Week schedule)	March 1-31 3 hrs. nightly
SHADE (10 Week schedule)	April 1-18 2 hrs. nightly

**Single Stemmed
Unpinched Crop**

March 28
No pinch
March 28-31
3 hrs. nightly
April 1-18
2 hrs. nightly

April 18

VARIETIES (Pompons)

Only 9 and 10 week varieties should be used with the above schedule.

WHITE *Shasta 10W
*Halo 9W
Pinocchio 9W,
extra early
*White Popcorn 9W,
productive
Sculpture 11W,
like Halo but
1 week later
*I. Snowdrift 10W
Dynamo 10W,
good after Aug. 15
Encore 10W¹
Keepsake 9W

PINK Minuet 11W
OK after Sept. 10
*Reward 9W
*Linda Lou 10W
1-2 weeks late.
Carolyn Yosick 8W
OK after Sept. 1
Pink Dot 9W

YELLOW *Gold Coast 9W
*Mary L. Hall 9W
*Golden Herald 9W
Crescendo 10W,
productive but a
little weak-necked
*Schneeburg's Daisy
9W
Pippin 11W,
OK after Sept. 10;
flowers 1-2 weeks
after above
varieties
Brigadoon 10W,
after Aug. 1

BRONZE *Beauregard 10W
*Chevron 10W
Like Seneca, but
no fading.
*Rubicon 10W
Buckskin 9W

¹OK from mid-Aug. on. Not over 1 to 2 weeks between pinch and shade (on single stemmed crops, between plant and shade).

VARIETIES (Standards)

WHITE *Betsy Ross 10W
Best July-Aug.
white
*Queen's Lace 9W
Silver Sheen 8W
Mefo 11W,
may show petal
burn in wet
weather. Nice.

PINK Mary Garden 9W,
OK in Sept.

YELLOW *Good News 9W,
best in Aug.-Sept.
*Yellow Lace 9W
*Yellow Mefo 11W

BRONZE *Mrs. Roy 10W,
nice in Sept.
Detroit News 9W,
OK after Sept. 1

TO FLOWER JULY 19

	Pinched Crop
PLANT CUTTINGS	March 22
PINCH	April 19
LIGHT PLANTS	March 22-31 3 hrs. nightly
SHADE	April 1-30 2 hrs. nightly
(10 Week schedule)	May 10

	Single Stemmed Unpinched Crop
	April 19
	No pinch
	April 19-30 2 hrs. nightly
	May 10

VARIETIES (Pompons and Standards)

Use varieties recommended to flower June 27.

TO FLOWER AUGUST 4

	Pinched Crop
PLANT CUTTINGS	April 7
PINCH	May 5
LIGHT PLANTS	April 7-30 2 hrs. nightly
SHADE	May 26
(10 Week schedule)	

	Single Stemmed Unpinched Crop
	May 5
	No pinch
	No lights
	May 26

VARIETIES (Pompons and Standards)

Use varieties recommended to flower June 27.

TO FLOWER AUGUST 20

	Pinched Crop
PLANT CUTTINGS	April 23
PINCH	May 21
LIGHT PLANTS	April 23-30 2 hrs. nightly
SHADE	June 11
(10 Week schedule)	

	Single Stemmed Unpinched Crop
	May 21
	No pinch
	No lights
	June 11

VARIETIES (Pompons and Standards)

Use varieties recommended to flower June 27.

TO FLOWER SEPTEMBER 3

	Pinched Crop
PLANT CUTTINGS	May 14
PINCH	June 4
LIGHT CUTTINGS	No lights
SHADE	June 25
(10 Week schedule)	

	Single Stemmed Unpinched Crop
	June 4
	No pinch
	No lights
	June 25

VARIETIES (Pompons and Standards)

Use varieties recommended to flower June 27.

*Preferred varieties.

TO FLOWER SEPTEMBER 14

	Pinched Crop	Single Stemmed Unpinched Crop
PLANT CUTTINGS	May 25	June 15
PINCH	June 15	No pinch
LIGHT PLANTS	No lights	No lights
SHADE	July 6 (10 Week schedule)	July 6

VARIETIES (Pompons and Standards)

Use varieties recommended to flower June 27.

TO FLOWER SEPTEMBER 28

	Pinched Crop	Single Stemmed Unpinched Crop
PLANT CUTTINGS	June 1	June 22
PINCH	June 22	No pinch
LIGHT PLANTS	No lights	No lights
SHADE	July 13 (11 Week schedule)	July 13

VARIETIES (Pompons)

Only 10 and 11 week varieties should be used with the above schedule.

WHITE	YELLOW	Single Stemmed Unpinched Crop
*Shasta 10W	Lollipop 11W	Pippin 11W
*Snowflurry 11W	*Golden Chord 11W	Mary L. Hall 9W
Little America 10W	*Yellow Shasta 10W	Schneeburg's Daisy 9W
*Moonglow 10W	Halo 9W	Forty-Niner 11W
Priscilla 11W	*I. Snowdrift 10W	Gold Coast 9W
Paramount 11W	Encore 10W	
Halo 9W	Seagull 9W	
*I. Snowdrift 10W		
Encore 10W		
Seagull 9W		

PINK	BRONZE	Single Stemmed Unpinched Crop
*Linda Lou 10W	Beauregard 10W	*Rubicon 10W
Masterpiece 10W	Festival 11W	Copperhead 10W
Minuet 11W		*Paragon 10W
Soprano 10W		
*Grand Slam 11W		

VARIETIES (Standards)

WHITE	YELLOW	Single Stemmed Unpinched Crop
*Ind. White 10W	Ind. Yellow 10W	*Yellow Mefo 11W
*Mefo 11W	*Yellow Lace 9W	Good News 9W
*Queen's Lace 9W		

PINK	BRONZE	Single Stemmed Unpinched Crop
*Ind. Pink 10W	Ind. Bronze 10W	*Mrs. Roy 10W
		Detroit News 9W

TO FLOWER OCTOBER 7

	Pinched Crop	Single Stemmed Unpinched Crop
PLANT CUTTINGS	June 10	July 1
PINCH	July 1	No pinch
LIGHT PLANTS	No lights	No lights
SHADE	July 22 (11 Week schedule)	July 22

VARIETIES (Pompons and Standards)

Use varieties recommended to flower September 28.

TO FLOWER OCTOBER 16

	Pinched Crop	Single Stemmed Unpinched Crop
PLANT CUTTINGS	June 12	July 3
PINCH	July 3	No pinch
LIGHT PLANTS	No lights	No lights
SHADE	July 31 (11 Week schedule)	July 31

VARIETIES (Pompons and Standards)

Use varieties recommended to flower September 28.

TO FLOWER NOVEMBER 13

	Pinched Crop	Single Stemmed Unpinched Crop
PLANT CUTTINGS	July 3	July 24
PINCH	July 24	No pinch
LIGHT PLANTS	Aug. 1-28 2 hrs. nightly	Aug. 1-28 2 hrs. nightly
SHADE (11 Week schedule)	Aug. 28	Aug. 28

VARIETIES (Pompons)

Only 10 and 11 week varieties should be used with this schedule.

WHITE	Shasta 10W *Little America 10W, very productive	YELLOW	Lollipop 11W Pippin 11W *Golden Chord 11W *Yellow Shasta 10W Forty Niner 11W
	*Priscilla 11W Moonglow 10W *Snowflurry 11W, very small button, extra productive.	BRONZE	*Beauregard 10W *Rubicon 10W Festival 11W Copperhead 10W Paragon 10W
PINK	Masterpiece 10W, very productive. Soprano 10W		

VARIETIES (Standards)

WHITE	Ind. White 10W *Mefo 11W	YELLOW	Ind. Yellow 10W *Yellow Mefo 11W
PINK	Ed. Seidewitz 11W Dk. Orchid Queen 10W	BRONZE	Mrs. Roy 10W Ind. Bronze 10W Detroit News 9W

*Preferred varieties.

TO FLOWER DECEMBER 3

	Pinched Crop	Single Stemmed Unpinched Crop
PLANT CUTTINGS	July 16	Aug. 6
PINCH	Aug. 6	No pinch
LIGHT PLANTS	Aug. 1-31 2 hrs. nightly	Aug. 6-31 2 hrs. nightly
SHADE (12 Week schedule)	Sept. 1-10 3 hrs. nightly	Sept. 1-10 3 hrs. nightly

VARIETIES (Pompons)

Only 11 and 12 week varieties should be used with the above schedule.

WHITE	*Wh. Valencia 12W	YELLOW	*Omega 12W Lollipop 11W Yellow Cameo 13W, late.
	Good up to Christmas.		*Yellow Valencia 12W (Golden Jane)
	*Cordova 12W		
	*Belray 12W		
	Snowflurry 11W		
	Cameo 13W, late.		
PINK	*Valencia 12W	BRONZE	*Apricot Valencia 12W Crimson Valencia 12W Galaxy 12W Holiday 13W
	Dark Valencia 12W		

VARIETIES (Standards)

WHITE	Chattanooga 12W Dec. Glory 12W	YELLOW	Yel. Chattanooga 12W Golden Mrs. Ross 12W Golden Pearson 12W
		BRONZE	Oak Leaf 12W Gladys Pearson 12W

POT MUMS 'ROUND THE YEAR

As with cut flower Mums the "season" for pot Mums is gradually spreading. Early shading for flowering thru August, September and October is common. This past season a great increase was noted in pot Mums flowered during spring and early summer. They make a nice plant at this time and are not hard to grow. The pot Mums produced this past spring in our own trial program were eagerly bought up before they were really open—"something different" is the usual comment. Pot Mums during the real winter months (January-March) are not so easy to grow, but with more experience, plus better varieties now on the way, they may become a serious winter pot plant, too.

The tables (page 39) are self-explanatory as to dates for planting, pinching, shading, etc. We should point out that, owing to the rather limited experience and records available, these tables may not prove entirely accurate under your conditions. Our tests this past spring pointed out how much flowering can be delayed by cooler temperatures. Bob Jung of Indianapolis reports that long spells of cloudy weather in midwinter will shorten days so much as to advance flowering dates substantially. Also, it will result in very short plants. Southern growers will find further corrections necessary—as with cut Mum schedules.

Especially on winter and even spring flowering schedules where growers have not had previous experience, we recommend that your first season's plantings not be too large.

If you plan to give pot Mums a try, we urge you to keep complete records of what you do, flowering dates and height at flowering time. Without this information, you will not be able to make the adjustments in dates for next year's program that will enable you to improve the quality of plants you grow.



Pot Mum culture at the Ernst-Jung range, Indianapolis, Indiana. Left: cuttings just potted off. Right: Bob Jung displays a well shaped Bonaffon DeLuxe with buds set. Year round pot Mums with emphasis on spring-summer flowering such as this is being carried on by many progressive growers.

About Shading

Apply black cloth to all plants on "start shade" date (see table) daily from 5 P.M. to 7:30 A.M. Black cloth shading is not needed between September 15 and February 15 (even tho indicated on the schedule) because days are naturally short enough to set buds.

Lights

Light all plants between planting date and "start shade" date as follows:

During	Hours per night	During	Hours per night
August	2	January	5
September	2½	February	4
October	3	March	3
November	4	April	2
December	5		

Artificial light is not necessary between May 1 and August 1 because days are normally long enough to prevent budding.

One Pinch, Two Pinches, or Three?

It seems to be a question of what price plant your trade calls for. A three-inch plant is heavier and finer—but it takes three weeks longer to grow than a two-pinch plant. Three pinches mean more disbudding, watering, spraying, and the cost of pinching, too. The same differences apply between two pinches and one pinch. In general it is possible to make up for the difference between one and two-pinch plants by using more cuttings—many growers do. A two-pinch 6 inch plant in the spring may bring \$1.50 (wholesale) where a single pinch (same number of cuttings) flowered at the same time would go for \$1.25.

In general it seems that most plants produced in the January-March period are single-pinch plants—perhaps partly because space is at more of a premium then. Spring plants (flowered April-June) are predominantly single-pinch, but two-pinch plants are grown during this period. Plants flowered in summer are usually two-pinch, with some pinched three times. Toward fall more and more three-pinch plants are grown.

Two-pinch plants tend to be not quite so tall as three-pinch plants.

There are schedules where the grower pots the cutting, pinches, and starts to shade all on the same date—"pot, pinch, and shade." In general, recent experience seems to favor a period of at least a week or two between planting cuttings and the shade-pinch date.

About Temperatures

At least a 60° minimum temperature must be provided between "start shade" date and formation of buds. As with cut Mums, this can be provided in a 50-55° house by setting plants on a raised bench, covering them with sateen after dark, and turning on pipe below the bench.

Before and after this period, 60° is recommended. Growing at much less than 60° during this "before and after" period will tend to delay flowering; the schedule must be advanced a week or two accordingly.

Bob Jung has grown excellent quality Bonaffon DeLuxe and Queen of Pinks for February-March flowering at 65° to 70° nights right thru. One lot flowered at a straight 70° minimum was especially fine and hard—no staking, of course. Bob recommends a straight 65° minimum for late winter-spring flowering of pot Mums. Higher temperatures give fuller, better flower sprays; and do not soften plants if proper varieties are used. Blazing Gold won't stand these high temperatures in winter.

Incidentally, it was our experience that, when growing for a certain holiday, it worked out better to aim our schedule to be in flower a week, or even more, ahead of the actual holiday date. At best, plants to be sold for Mother's Day must be out where the customers can see them thru the week before.

How Many Cuttings Per Pot?

Note, for example, under single pinch plants for April-May-June blooming, that 4 cuttings are recommended for a 6 inch pot. Actually, 3 cuttings will make a presentable plant in most cases—and 5 will make a fuller looking plant than 4. Try it out both ways for yourself. Varieties that break easily and quickly require fewer cuttings per pot. It really depends on what your trade calls for. Also, a very nice plant can be produced with fewer cuttings in smaller pots—5's, or even 4's.

One of the best pot Mum growers we have seen grows everything right thru the year at 5 cuttings per 6-inch pot—regardless.

If Plants Flower Too Tall

Most growers aim at a 15 to 18-inch plant.

Stem length on the finished plant can be shortened by delaying the final pinch a week—or even two weeks longer than the schedule calls for. Let's take Queen's Lace on the two-pinch schedule for April-May-June flowering: The schedule calls for final pinch 9 weeks before flowering date. If too tall, next season make final pinch 8 weeks before desired flowering date. All other dates remain the same.

The date you start shading controls the date the plants flower. If a lot of plants flower a week late this year, simply move the entire schedule up one week earlier next year.

Notes on Pot Mum Culture

Probably you've grown them before; if not here are some suggestions.

We find either peat or manure added to the soil will really make 'em grow. It also cuts down watering. Superphosphate should be added to soil before potting. As plants get into active growth, we give them a weekly feeding with a not strong, balanced liquid fertilizer. Weekly spraying with wettable Parathion (see page 27) will control insects.

Like any other Mums, pot Mums appreciate a "wetting down" of foliage on hot afternoons. They like humidity. And incidentally, they *don't* like to get dry at the roots. Pot Mums can be summered over outdoors in frames or in cloth houses; but they require such careful watching that it's almost better to have them under glass.

About disbudding. As plants set bud, each stem should be disbudded to leave only the center bud. Exceptions: a very few Poms grown as a pot plant, such as Gypsy.

Avoid crowding the plants; it makes them tall, spindly, and poor.

Leave 3 sets of leaves as you pinch each time, if possible. All pinches should be into soft wood. Often it is possible to use the tips you remove for cuttings for later flowerings. But don't get off schedule to economize on a few cuttings—it doesn't pay!

HARDIES AS POT PLANTS

For the past several springs, increasing numbers of growers have finished a batch of hardy or garden Mums in pots for Mother's Day. They are quickly (90 days) and easily grown, make showy and unusual pot plants. They have added sales appeal in that, after flowering, they may be planted outdoors for another crop of blooms in the fall.

Here is a simple schedule worked out by William Skou at Ohio State: (For May 1 flowering)

February 8: Plant 5 rooted cuttings in a 5 or 6 inch pot, pinch same day and start lighting 5 hours per night. Same light intensity as for cut Mums. Minimum temperature throughout the crop: 60 degrees.

March 8: Discontinue lights. Pinch plants again, start regular black cloth shading from 5 P.M. to 8 A.M. daily till plants are in flower.

Varieties: (Date after each variety is flowering date if above schedule is followed.)

White: Avalanche, April 28; Calcite, May 7; Christopher Columbus, May 7; Classic, May 1; Pepita, May 1; Renown, April 28; Silverplate, April 29; White Wonder, May 7.

Yellow: Bamboo, May 3; Carnival, May 7; Early Gold, April 28; Early Yellow, May 3; Gold Rush, May 2; Lemonade, April 28; September Sunshine, May 3; Witchery, May 3; Yellow Christopher Columbus, May 1; Yellow Spoon, May 1; Yellow Supreme, May 10.

Pink: Joybringer, May 2; Major Cushion, May 3; September Cheer, May 3; Serenade, April 28.

Apricot: Calico, May 1; Tiffany Rose, April 28; W. P. Snyder, April 28.

Bronze: Carmelita, May 1; Early Bronze, April 28; James Stewart, May 1; Mona, May 1.

Orchid: Jewell, April 28; Spellbound, April 28.

POT MUM SCHEDULE

TO FLOWER POT MUMS AT NORMAL DATES—

(No shade or light)

Varieties	Normal flowering date	Plant 3 cuttings per 6" pot	First pinch	Second pinch	Third (final) pinch
*Blazing Gold	Oct. 25				
*Granite State	Oct. 25				
*Gold Lode	Oct. 15				
Queen's Lace	Nov. 1				
Yellow Lace	Nov. 1				
*Ind. White	Nov. 8				
*Ind. Yellow	Nov. 5				
Ind. Pink	Nov. 8				
*Gypsy	Nov. 15				
*Queen of Pinks	Nov. 10				
Copperhead	Nov. 10				
Richard Mandel	Nov. 10				
*Little America	Nov. 10				
*Bon. Deluxe	Nov. 20				
Friendly Rival	Nov. 20				
*Beaut. Lady	Nov. 25				
Sun Gold	Nov. 25				
Margaret Moeller	Dec. 5				
Smith's Late White	Dec. 15				
		July 5	July 12	Aug. 1	Sept. 8
					Sept. 13

To grow two-pinch plants at normal flowering date, eliminate the first pinch, and plant cuttings two weeks prior to the second pinch date. Pinch once on "second pinch" date—and make final pinch on "final pinch" date given.

Bob Jung reports that to correct too early flowering of Thanksgiving pot Mums he uses lights. His schedule: Apply 4 hours of lights for the 10 nights preceding final pinch—September 18 in his schedule. To spread the crop out, part can be lighted 15 nights, part 10, and part only 5 nights preceding the last pinch. Varieties? Bonaffon DeLuxe, Queen of Pinks, and Little America.

*Preferred varieties.

TO FLOWER POT MUMS IN JANUARY-FEBRUARY-MARCH

Single-pinch Method

Varieties	Plant 4 cuttings per 6" pot ¹	Start to Shade	Pinch (once only)
Blazing Gold (uneven flowering in dark weather)	10 wks. before flowering date	8 wks. before flowering date	8 wks. before flowering date
Granite State Sunray			
Ind. White Ind. Yellow Ind. Pink *Queen's Lace ² *Yellow Lace	11 wks. before flowering date	10 wks. before flowering date	9 wks. before flowering date
*Bon. Deluxe *Copperhead (very nice in February) *Queen of Pinks	13 wks. before flowering date	11 wks. before flowering date	11 wks. before flowering date
*Little Amer. (some uneven in winter, but not bad)	14 wks. before flowering date	12 wks. before flowering date	12 wks. before flowering date
Silversmith (apt to be tall)	15 wks. before flowering date	13 wks. before flowering date	13 wks. before flowering date
All plants must be lighted from planting date till "Start to Shade"—except during summer. See page 38 for details.			
TO FLOWER POT MUMS IN APRIL-MAY-JUNE			
Single-pinch Schedule			
Varieties	Plant 4 cuttings per 6" pot	Start to Shade	Pinch (once only)
Blazing Gold Granite State (go easy) Sunray	9 wks. before flowering date	8 wks. before flowering date	8 wks. before flowering date

1. Note for March flowering crops: to further shorten plants some growers plant cuttings only one week prior to shading date instead of two weeks as shown above.

2. The two Lace varieties are excellent for January-February flowering but are apt to get tall. To offset this, plant cuttings on the "start shade" date, then pinch one week later. They may need staking, but they are so striking that they are worth it.

*Queen's Lace	11 wks. before flowering date	10 wks. before flowering date	9 wks. before flowering date	13 wks. before flowering date	12 wks. before flowering date	12 wks. before flowering date
*Yel. Lace						
Ind. White (apt to be tall)						
Ind. Yellow						
Ind. Pink						

Copperhead	12 wks. before flowering date	11 wks. before flowering date	11 wks. before flowering date	13 wks. before flowering date	12 wks. before flowering date	9 wks. before flowering date
*Bon. Deluxe						
*Queen of Pinks						
Richard Mandel						
Linda Lou						

*Little Amer.	13 wks. before flowering date	12 wks. before flowering date	12 wks. before flowering date	13 wks. before flowering date	12 wks. before flowering date	12 wks. before flowering date

Two-pinch Schedule

Varieties	Plant 4 cuttings per 6" pot	First Pinch	Start to Shade	Final Pinch
Blazing Gold	13 wks. before flowering date	11 wks. before flowering date	8 wks. before flowering date	8 wks. before flowering date
Granite State				
Sunray				
*Queen's Lace	15 wks. before flowering date	13 wks. before flowering date	10 wks. before flowering date	9 wks. before flowering date
*Yellow Lace				
Ind. White				
Ind. Yellow				
Ind. Pink				
Copperhead	17 wks. before flowering date	15 wks. before flowering date	12 wks. before flowering date	12 wks. before flowering date
*Bon. DeLuxe				
*Queen of Pinks				
Richard Mandel				
Linda Lou				
*Little Amer.				

All plants must be lighted from planting date till "Start to Shade"—except during summer. See page 38 for details.

TO FLOWER POT MUMS IN JULY-AUGUST

Single-pinch Method

Varieties	Plant 4 cuttings per 6" pot	Start to Shade	Pinch ¹ (once only)
*Gold Lode			
*Blazing Gold	10 wks. before flowering date	9 wks. before flowering date	9 wks. before flowering date
Sunray			
*Granite State			
Ind. White	10 wks. before flowering date	10 wks. before flowering date	9 wks. before flowering date
Ind. Yellow			
Copperhead (may fade)	12 wks. before flowering date	11 wks. before flowering date	11 wks. before flowering date
*Bon. Deluxe			
Linda Lou (may fade)			
Richard Mandel			
*Queen of Pinks			

*Little Amer.	13 wks. before flowering date	12 wks. before flowering date	12 wks. before flowering date
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Two-pinch Schedule

Varieties	Plant 3 cuttings per 6" pot	¹ First Pinch	Start to Shade	Final Pinch
*Gold Lode	13 wks. before flowering date	12 wks. before flowering date	9 wks. before flowering date	9 wks. before flowering date
*Blazing Gold				
Sunray				
*Granite State				
Ind. White	13 wks. before flowering date	12 wks. before flowering date	10 wks. before flowering date	9 wks. before flowering date
Ind. Yellow				
Copperhead (may fade)	15 wks. before flowering date	14 wks. before flowering date	11 wks. before flowering date	11 wks. before flowering date
*Bon. DeLuxe				
Linda Lou (may fade)				
Richard Mandel				
*Queen of Pinks				
*Little Amer.	16 wks. before flowering date	15 wks. before flowering date	12 wks. before flowering date	12 wks. before flowering date

All plants must be lighted from planting date till "Start to Shade"—except during summer. See page 38 for details.

TO FLOWER POT MUMS IN SEPTEMBER-OCTOBER

Two-pinch Method

Varieties	Plant 3 cuttings per 6" pot	First Pinch	Start to Shade	Final Pinch
Blazing Gold	14 wks. before flowering date	11 wks. before flowering date	9 wks. before flowering date	9 wks. before flowering date
Granite State				
Sunray				
Queen's Lace	14 wks. before flowering date	12 wks. before flowering date	10 wks. before flowering date	9 wks. before flowering date
Yellow Lace				
Ind. White				
Ind. Yellow				
Ind. Pink				
Gypsy	16 wks. before flowering date	14 wks. before flowering date	11 wks. before flowering date	11 wks. before flowering date
Copperhead				
*Bon. Deluxe				
*Queen of Pinks				
Richard Mandel				
Linda Lou				
*Little Amer.	17 wks. before flowering date	15 wks. before flowering date	12 wks. before flowering date	12 wks. before flowering date

*Preferred varieties.

1. Some growers delay the pinch 2 or even 3 weeks to help keep plants short. With a two-week delay on the above schedule, for example, Bonaffon Deluxe would be pinched 9 weeks before flowering date.

BALL BETTER PLANT BANDS and PLANTRAYS

for Bedding Plants . . . Perennials . . . Nursery Stock
Chrysanthemums . . . Carnations
Vegetables

- Made of specially prepared, decay-resisting veneer
- Double galvanized-stapled to really HOLD
- Easy to open; come completely assembled
- Easy to fill; lots faster than small pots one at a time
- Transplanting insurance; plants take hold more quickly and with less loss
- Better growth; a band holds more soil than a pot of equal size—no root binding.

Something new has been added to our line of Ball Veneer "PlanTrays."

No. 2-X. $6\frac{1}{4} \times 8\frac{1}{2} \times 2\frac{1}{2}$ inches deep. Holds 1 dozen $2 \times 2\frac{1}{2}$ -inch bands. **No. 3-X.** $7\frac{3}{4} \times 10\frac{1}{2} \times 2\frac{1}{2}$ inches deep. Holds 1 dozen $2\frac{1}{2} \times 2\frac{1}{2}$ -inch bands. **No. 4-X.** $9\frac{1}{4} \times 12\frac{1}{4} \times 2\frac{1}{2}$ inches deep. Holds 1 dozen 3×3 -inch bands.

These PlanTrays are extra-heavy—make very sturdy small flats that will stand up with rough handling. Just the thing for good-sized plants of any kind to bring in real profits for you. They are made just like our regular (No. 1, 2 and 3-R) PlanTrays except that the veneer is **double thick**, giving them the strength and stiffness of a small wood flat.

Note also our No. 1 Special and our No. 2 Special PlanTrays. For the grower selling small plants in quantity, these hold 25 plants.

All our PlanTrays are completely stitched and made up. They are flipped open very easily and quickly (no folding), ready to put in bands and soil. Glad to send samples—state size and quantity you could use.

Our price schedule below has been set up to give you the most saving for the quantity of bands and PlanTrays you buy. If you want to take advantage of the lower unit price, look ahead and order as many of one size as you can use—even as much as a 2-year supply. They will be as good at the end of that time as when you get them. Price per 1000 is based on quantity of **one size** ordered. Please watch this carefully in making up your order.

Be sure to state how to ship: freight, express, or truck.

Prices shown below effective as of Nov. 1, 1951 and are subject to change without notice.

PRICES BALL VENEER PLANT BANDS

Size	Shipping units of	Price per 1000 in quantities as shown below.					
		0-4000	5000- 10,000	11,000- 25,000	26,000- 50,000	51,000- 100,000	101,000- up
$1\frac{3}{4} \times 1\frac{3}{4} \times 2$	2000	\$4.90	\$4.65	\$4.45	\$4.10	\$4.05	\$3.95
$1\frac{3}{4} \times 1\frac{3}{4} \times 2\frac{1}{2}$	2000	5.25	5.00	4.80	4.60	4.40	4.25
$2 \times 2 \times 2$	2000	5.05	4.85	4.60	4.45	4.30	4.10
$2 \times 2 \times 2\frac{1}{2}$	2000	5.70	5.40	5.20	4.95	4.75	4.60
$2 \times 2 \times 3$	2000	5.95	5.65	5.40	5.20	5.00	4.80
$2\frac{1}{2} \times 2\frac{1}{2} \times 2\frac{1}{2}$	2000	6.10	5.85	5.60	5.35	5.15	4.95
$2\frac{1}{2} \times 2\frac{1}{2} \times 3$	2000	6.40	6.10	5.85	5.60	5.40	5.20
$3 \times 3 \times 3$	1000	6.65	6.35	6.05	5.80	5.55	5.35
$3 \times 3 \times 4$	1000	7.45	7.10	6.80	6.50	6.25	6.00
$4 \times 4 \times 3$	1000	7.45	7.10	6.80	6.50	6.25	6.00
$4 \times 4 \times 4$	1000	8.20	7.85	7.50	7.20	6.90	6.65

PRICES BALL PLANTRAYS

Size	Shipping units of	Price per 1000 in quantities as shown below					
		0-375	500- 975	1000- 2450	2500- 9950	10,000 19,950	20,000- up
No. 1-R (holds 12 $1\frac{3}{4} \times 2\frac{1}{2}$ bands)	125 and 250	\$40.90	\$39.05	\$37.35	\$35.80	\$34.35	\$33.05
No. 2-R (holds 12 $2 \times 2\frac{1}{2}$ bands)	125 and 250	43.90	41.90	40.05	38.40	36.85	35.45
No. 3-R (holds 12 $2\frac{1}{2} \times 2\frac{1}{2}$ bands)	125 and 250	50.15	47.85	45.75	43.85	42.10	40.50
No. 2-X (holds 12 $2 \times 2\frac{1}{2}$ bands)	125	52.30	49.95	47.75	45.75	43.95	42.25
No. 3-X (holds 12 $2\frac{1}{2} \times 2\frac{1}{2}$ bands)	125	60.15	57.45	54.95	52.65	50.55	48.60
No. 4-X (holds 12 3×3 bands)	125	66.70	63.65	60.90	58.35	56.05	53.85
No. 1-S (holds 25 $1\frac{3}{4} \times 2$ bands)	125	43.70	41.75	39.90	38.25	36.70	35.30
No. 2-S (holds 25 2×2 bands)	125	48.05	45.85	43.85	42.05	40.35	38.80

On PlanTrays an additional charge of 10% will be added for odd quantities requiring us to break shipping containers. We cannot break containers on Plant Bands.

We also handle Bird Neponset Pots, Plant Bands No. 10 and "D" type and Tom Thumb Flats, at regular advertised prices.



Young Tomato plants thriving in this No. 2R PlanTray— $2 \times 2\frac{1}{2}$ " Bands.



This Mum plant is ready for the bench and will really grow. That's a $2\frac{1}{2} \times 2\frac{1}{2} \times 3$ band.

West Coast Glad Bulbs

Our bulbs are hand dug, hand cleaned and graded, and are not mutilated or bruised by machinery. This costs us more, but it is your insurance of quality stock. Our stock is guaranteed true to name, and free from disease and thrip. Full size and

count, hand graded and selected. Sold under usual disclaimer. The following are the very finest varieties for commercial growing.

PINK and SALMON

	No. 1 1 1/2 In.-up Per 100	No. 2 1 1/4-1 1/2 In. Per 100	No. 1 1 1/2 In.-up Per 1000	No. 2 1 1/4-1 1/2 In. Per 1000
Chamouny. Cerise-rose, silver edge.....	\$3.75	\$32.00	\$3.00	\$26.00
Daisy Mae. Orange pink, cherry throat.....	5.00	45.00	4.50	38.00
Ethel Cave Cole. Light pink.....	3.75	32.00	3.00	26.00
Miss Wisconsin. Deep lavender rose.....	5.00	45.00	4.50	38.00
Phantom Beauty. Light pink.....	3.75	32.00	3.00	26.00
Picardy. Salmon pink	3.75	32.00	3.00	26.00

LAVENDER and BLUE

Abu Hassan. Dark violet blue.....	5.00	45.00	4.50	38.00
Blue Beauty. Medium blue.....	3.75	32.00	3.00	26.00
Elizabeth the Queen. Ruffled lavender.....	3.75	32.00	3.00	26.00
King Lear. Ruffled purple.....	3.75	32.00	3.00	26.00
Minuet. Clear lavender	4.50	38.00	3.75	32.00
Ravel. Violet, reddish brown throat.....	5.00	45.00	4.50	38.00

WHITE, CREAM and YELLOW

Corona. Cream, rose edge.....	4.50	38.00	3.75	32.00
Golden Arrow. Light yellow.....	5.00	45.00	4.50	38.00
Golden State. Deep yellow.....	3.75	32.00	3.00	26.00
June Bells. Early ruffled white.....	3.75	32.00	3.00	26.00
Leading Lady. Cream white sport of Picardy.....	3.75	32.00	3.00	26.00
Maid of Orleans. Milky white.....	3.75	32.00	3.00	26.00
Margaret Beaton. White, cherry throat.....	3.75	32.00	3.00	26.00
Pactolus. Ruffled buff with red blotch.....	8.00	75.00	7.00	65.00
Snow Princess. Beautiful white.....	3.75	32.00	3.00	26.00
Yellow Emperor. Rich yellow.....	3.75	32.00	3.00	26.00

SCARLET

Beacon. Salmon scarlet, cream throat.....	3.75	32.00	3.00	26.00
Burma. Deep rose red, ruffled.....	3.75	32.00	3.00	26.00
Dr. Bennett. Large, fiery scarlet.....	3.75	32.00	3.00	26.00
Nancy. Bright scarlet red; extra fine.....	4.50	38.00	3.75	32.00
Valeria. Early Scarlet	4.50	38.00	3.75	32.00

MIXTURE

Florists' Mixed. Well balanced.....	3.75	32.00	3.00	26.00
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GLADIOLI COLLECTION

For Bulb Sales or Cut Flowers

Contains 250 No. 2 size bulbs each of the 8 popular varieties listed below. Colored pictures to help you sell bulbs come with each collection. Order now and be ready for those early spring sales. Delivery January to May.

Minuet
Picardy
Snow Princess
Yellow Emperor

1 Case of 2000 Bulbs (Collection).....\$53.50

Prices are f.o.b. shipping point, and are subject to change without notice. Minimum order 500 bulbs; 100 of a variety. 250 or more of any one variety at 1000 rate. Cash with order, or 25% deposit will hold bulbs until shipment is wanted, providing it does not exceed May 1st, unless other provisions are made. Field and storage are State inspected. All bulbs offered are subject to prior sale, so, if out of any variety, we will substitute with one equally good or better unless instructed otherwise. All shipments will be made by express collect.



Ball Better Lily Bulbs

JAPANESE GROWN LILIES

F.O.B. West Chicago. Minimum Order 100 Bulbs

AURATUM (Gold Band)

White, spotted crimson; gold stripes

Size	Per 100	Per Case
7- 9 in., 250 bulbs per case.....	\$20.00	\$40.00
8- 9 in., 200 bulbs per case.....	22.50	37.50
9-10 in., 140 bulbs per case.....	36.00	40.00
9-11 in., 125 bulbs per case.....	40.00	40.00
10-11 in., 100 bulbs per case.....		35.00

RUBRUM (Speciosum)

Carmine-pink

Size	Per 100	Per Case
7- 9 in., 250 bulbs per case.....	\$20.00	\$38.00
8- 9 in., 200 bulbs per case.....	22.50	38.00
9-10 in., 140 bulbs per case.....	30.00	32.50
9-11 in., 125 bulbs per case.....	32.50	32.50
10-11 in., 100 bulbs per case.....		32.00

PLATYPHYLLUM (Auratum)

Less spotted than Gold Band

Size	Per 100	Per Case
8- 9 in., 200 bulbs per case.....	\$35.00	\$60.00
9-10 in., 140 bulbs per case.....	45.00	50.00

ALBUM (Speciosum) (White Rubrum)

Size	Per 100	Per Case
7- 8 in., 250 bulbs per case.....	\$35.00	\$80.00
8- 9 in., 200 bulbs per case.....	40.00	75.00
9-10 in., 140 bulbs per case.....	60.00	75.00

GIGANTEUM

Size	Per 100	Per Case
7- 9 in., 300 bulbs per case.....	\$20.00	\$45.00
8-10 in., 225 bulbs per case.....	25.00	45.00

ERABU

Size	Per 100	Per Case
9-10 in., 200 bulbs per case.....	\$26.00	\$45.00
10-11 in., 150 bulbs per case.....	35.00	45.00

PACIFIC NORTHWEST CROFTS

PRICES ON
REQUEST

FANCY LEAVED CALADIUMS

For Pot Plants, Cutting and Gardens

Candidum. Leaf snow-white with green veins and network, narrow green border.

Crimson Wave. Deep green leaf with crinkled, transparent crimson or scarlet center, crimson spots toward edge.

Mrs. F. Sander. Dark green leaf heavily blotched, transparent deep rose.

Mrs. W. B. Haldeman. Medium leaf of bright pink with narrow green edge.

Exposition. Bright red, dark green edge.

Reconcavo. Delicate rose center with carmine ribs.

Lord Derby. Transparent rose with dark green ribs and narrow green edge.

Thos. Tomlinson. Bright crimson center and blotches, narrow green edge.

Caladium Prices

Size	Named and Mixed Varieties		Per 100	Per 1000
	Per 100	Per 1000		
1-1 1/2 in. diameter. No. 2.....	\$15.00	\$120.00		
1 1/2-2 1/2 in. diameter. No. 1.....	22.50	200.00		
2 1/2-3 1/2 in. diameter. Jumbo.....	32.50	300.00		
3 1/2 in. up. Mammoth.....	45.00	400.00		

All Caladium tubers shipped f.o.b. Florida.
Minimum order 50 bulbs.

TUBEROUS ROOTED BEGONIAS (Belgian-Grown)

December-January delivery, subject to prior sale.

DOUBLE CAMELLIA-FLOWERED

Scarlet Rose	Crimson Salmon	Yellow White	Orange Copper	Mixed	Per 100	Per 1000
Size						
1 1/2-2 in.					\$12.50	\$100.00
2 in. up					15.00	125.00

Minimum order 50 bulbs.

All Begonia tubers shipped f.o.b. West Chicago, Ill.



Tuberous-Rooted Begonias.



Caladiums make ideal pot plants in addition to their usefulness for cutting and outdoor bedding in partial shade.

CANNAS

Quality 3- to 5-eye divisions for delivery December through spring 1952.

The President. This variety is extremely popular. Double flowering, rich red clusters 7 to 10 inches in diameter, 8 to 10 inches long. Heavy green foliage. Dwarf, 2 1/2 to 3 1/2 ft. high.

Red King Humbert. A remarkable Canna, a favorite for years. Large scarlet-red flowers 6 to 7 inches in diameter. Bronze foliage. Broad, tropical leaves. 3 1/2 to 4 ft. high.

Yellow King Humbert. An old favorite, considered one of the best yellow Cannas. Flowers are yellow, blotched with red. Petals are large, measuring from 4 to 5 inches in diameter. Foliage is a light green. Medium height, 3 to 4 ft.

City of Portland. Fine pink flowers that hold their color through hot, dry periods. Clusters measure 4 to 5 inches in diameter. Attractive deep green foliage. 3 1/2 ft. high.

\$6.00 per 100, \$55.00 per 1000. 250 at 1000 rate.
Minimum order 100, 50 of a variety. Shipping boxes hold
200 divisions.

GLOXINAS (Belgian-Grown)

December-January delivery, subject to prior sale.

Emperor Frederic. Scarlet, bordered white.

Emperor William. Violet, bordered white.

King of the Reds. Bright red.

Mont Blanc. Pure white.

Blanche de Merou. Rose, white throat.

Princess Elizabeth. Blue, white throat.

Violacea. Violet.

Queen Wilhelmina. Pink.

Mixture of all above colors.

	Per 100	Per 1000
1 1/2-2 in.	\$17.50	\$150.00
2 in. up	22.50	200.00

Minimum order 50 bulbs.

All Gloxinia tubers shipped f.o.b. West Chicago.

Prices subject to change without notice.

Small Fruit—Berries

A Real Money-Maker For You

We've added a new line! For the first time in our almost 50 years we are offering small fruits and berries—thus adding another service to our long list of outstanding values for our customers. Plants offered are of outstanding quality and are grown by the foremost plant specialists in the country.

Write for quotations on fruit trees and other nursery items.

Minimum order 10 plants (except Strawberries). Additional quantities must be ordered in multiples of 10. Strawberries are packed in bunches of 25 plants; minimum order 25, additional quantities in multiples of 25 plants. All plants F.O.B. shipping point unless otherwise stated.

STRAWBERRY PLANTS

Red Rich (Plant Patent No. 993). Mammoth plants, huge berries. Produce all summer long and thruout the fall until winter freeze. All plants guaranteed. Complete planting instructions with each shipment. Limit 500 plants per customer. POSTPAID.

	25	50	100	250	500
Your Cost	\$2.25	\$4.25	\$8.25	\$20.50	\$39.00
Retail	5.00	8.50	15.00	.....	.....

Vermillion (New). Early, June bearing. Season about two weeks. Berries about same as Premier. Vigorous, resistant. 25 plants, \$1.75; 50 plants \$3.00; 100 plants, \$5.75.

Armore (New). June bearing. Very productive. Good shipper. 25 plants, 95c; 50 plants, \$1.50; 100 plants, \$2.60; 250 plants, \$5.25; 500 plants, \$8.75; 1000 plants, \$16.50.

Other Varieties

	25	100	250	1000
Ambrosia Late	\$0.40	\$1.25	\$2.25	\$8.00
Aroma	.40	1.25	2.25	8.00
Big Joe	.40	1.25	2.25	8.00
Blakemore	.40	1.25	2.25	7.50
Catskill	.45	1.35	2.50	9.00
Dorsett	.40	1.25	2.25	8.00
Dunlap	.40	1.00	2.00	7.00
Fairfax	.40	1.25	2.25	8.00
Fairland	.40	1.25	2.25	8.00
Fairpeake	.45	1.35	2.50	9.00
Gandy	.40	1.00	2.00	7.00
Gem	.70	2.25	4.50	16.00
Lupton Late	.40	1.25	2.25	8.00
Massey	.40	1.00	2.00	7.00
Mastodon	.70	2.25	4.50	16.00
Midland	.40	1.25	2.25	8.00
Missionary	.40	1.00	2.00	7.00
Perfection	.70	2.25	4.50	16.00
Premier	.40	1.25	2.25	8.00
Red Crop	.45	1.35	2.50	9.00
Red Star	.45	1.35	2.50	9.00
Robinson	.40	1.25	2.25	8.00
Southland	.40	1.25	2.25	8.00
Sparkle	.40	1.25	2.25	8.00
Streamliner	.70	2.25	4.50	16.00
Temple	.40	1.25	2.25	8.00

BLUEBERRY PLANTS

Cabot	Concord	Jersey	Rancocas	Rubel
			10	100
2 yr. 6 to 12 in.....			\$4.00	\$30.00
2 yr. 12 to 18 in.....			4.50	35.00
3 yr. 18 to 24 in.....			5.00	40.00
4 yr. 2 to 3 ft.....			6.50	55.00

GRAPE VINES

	10	100	1000
Agawam, red	2 yr. No. 1	\$2.00	\$15.00
	1 yr. No. 1	1.75	12.00
Brighton, red	2 yr. No. 1	2.00	15.00
	1 yr. No. 1	1.75	12.00
Caco, red	2 yr. No. 1	2.00	15.00
	1 yr. No. 1	1.75	12.00
Catawba, mahogany	2 yr. No. 1	2.00	15.00
	1 yr. No. 1	1.75	12.00
Concord, blue	2 yr. No. 1	1.75	12.00
	1 yr. No. 1	1.50	9.00
Delaware, red	2 yr. No. 1	2.25	18.00
	1 yr. No. 1	2.00	15.00
Fredonia, black	2 yr. No. 1	2.00	15.00
	1 yr. No. 1	1.75	12.00
Moore's Diamond, white	2 yr. No. 1	2.00	15.00
	1 yr. No. 1	1.75	12.00
Moore's Early, black	2 yr. No. 1	2.00	15.00
	1 yr. No. 1	1.75	12.00
Niagara, white	2 yr. No. 1	2.00	15.00
	1 yr. No. 1	1.75	12.00
Portland, white	2 yr. No. 1	2.25	18.00
	1 yr. No. 1	2.00	15.00
Worden, black	2 yr. No. 1	2.00	15.00
	1 yr. No. 1	1.75	12.00

RASPBERRIES

	25	100	1000
Cumberland No. 1 tips.....	\$2.25	\$6.00	\$50.00
Indian Summer No. 1 succors.....	2.25	7.50	65.00
Latham No. 1 succors.....	2.25	6.50	55.00
St. Regis No. 1 succors.....	2.25	6.50	55.00
Sunrise No. 1 succors.....	2.25	7.50	65.00

PHLOX COLLECTION

Two-Year Field-Grown Plants

Bright Eyes (Tall). Bright rose pink; dark red eyes.	Daily Sketch (Tall). A brilliant salmon pink.
Mary Louise (Med.). Pure, glistening white.	Royal Purple (Med.). Shaded violet; deeper eye.
Flash (Tall). A new scarlet red Phlox.	Salmon Glow (Med.). Flame pink; lighter eye.
6 Plants (Collection)	\$1.95 POSTPAID

B E T T E R M U M S



F O R F L O R I S T S

Ball-Grown Small Plants



2 1/4" banded Begonia plant.

All the 2 1/4-in. stock listed below is grown in Ball Better Bands and shipped in our "Ball-Pak." F.O.B. Shipping Point.

BEGONIAS

(Fibrous-Rooted)

2 1/4-In. Available to June

Adeline. Free flowering bright pink; dwarf and compact.

Ball Deep Rose. Deep rosy red during winter and spring, changing to luminous pink during warm weather. Dwarf.

Luminosa Compacta. Dwarf. Very attractive and popular scarlet-red.

Ball Red. Dwarf. Medium large flowers of bright scarlet.

Indian Maid. Intermediate. Bronze-leaved scarlet.

Carmen. Intermediate. Bright rose-pink flowers, bronze leaves.

Snowbank. Dwarf. Large, glistening white flowers.

Assorted.

\$10.00 per 100, \$90.00 per 1000. 250 at 1000 rate.
Minimum order 100; 25 of a variety.

SNAPS

2 1/4-In. Available Until March

PINK and ROSE

Rosanna (Ball Hyb. No. 9). Strong, clean-growing, heavy-producing deep rose. Early.

Dorcas Jane. HYBRID. Good stems and long spikes of silvery rose-pink.

Christina. HYBRID. Medium light pink.

Peggy Schumann. Beautiful creamy rose-pink.

RED and LAVENDER

Navajo (Ball Hyb. No. 8). Our best red.

Ball Lavender. Long stemmed and strong growing with good spikes of bright rosy lavender.

\$7.00 per 100, \$60.00 per 1000. 250 at 1000 rate.
Minimum order 100; 25 of a variety.

WHITE

Snowman (Ball Hyb. No. 5). Pure white with no suggestion of ivory.

Margaret. Clean ivory-white; very productive. The most popular variety on our entire list.

YELLOW

Golden Spike (Ball Hyb. No. 1). Golden yellow for mid-winter.

Patricia. HYBRID. Medium yellow.

BRONZE

Barbara. HYBRID. Large flowered bronze with pink throat.

Also Available
in Season

• • •

PRIMULA MALACOIDES

PRIMULA OBCONICA

MELIOR BEGONIAS

HYDRANGEAS

Write for variety and
price lists



60,000 2 1/4 in. banded Snaps growing in our greenhouses for shipping.

Azaleas for Growing On

Azalea sales have been increasing rapidly for the past several years. We have always considered our "growing on" stock the finest grown. By trimming more often our plants are short, stocky and well shaped and with peat growing the plants have a compact root ball which transplants easily without shock or set-back, also insuring light delivery.

KURUME and PERICAT

Coral Bells	Pinocchio
Hexe	Pink Supreme
Hinodegiri	Sweetheart Supreme
Snow	Pink Pearl
Fortune	Md. Pericat
Gardenia Supreme	

Prices Kurume and Pericat varieties:

	Per 100	Per 1000
Rooted Cuttings	\$ 50.00	
Transplants—heavy	150.00	
3 to 5 in.....	\$25.00	
4 to 6 in.....	35.00	
6 to 8 in.....	60.00	
8 to 10 in.....	80.00	



Coral Bells, one of the finest Pink Azaleas.

2 1/4-Inch GERANIUMS

BELGIAN INDICAS Own Root

Albert & Elizabeth	Triomphe
Eclaireur	Vervaeneana
Hexe de Saffelare	Vervaeneana Alba
Jean Haerens	

Prices Belgian Indicas:

	Per 100	Per 1000
Rooted Cuttings	\$ 75.00	
Transplants	150.00	
3 to 5 in.....	\$30.00	
4 to 6 in.....	50.00	
6 to 8 in.....	75.00	

GRAFTED BELGIAN INDICAS—Jean Haerens, Rubis, Albert & Elizabeth, Eclaireur, Niobe Triomphe; also Christmas flowering varieties. 5 to 7 in., 75c each.

F.O.B. Shipping Point. All varieties and sizes quoted are subject to prior sale. No packing charges. Add 10% when ordering less than 100 of any one variety.

LIGHT PINK

Enchantress Fiat. Appleblossom pink. \$150.00 per 1000.

RED

Better Times, cerise.

Pride of Camden, dark red.

Imp. Ricard, bright red.

Radio Red, brilliant red.

Olympic Red, scarlet red.

Red Fiat, bright red.

SALMON PINK

Madam Landry, bright salmon.

Pink Fiat, salmon pink.

Salmon Supreme, salmon pink.

WHITE

Madam Buchner

Snowball

Madonna

Prices, all above 2 1/4 inch Geraniums (except Enchantress Fiat), \$125.00 per 1000.

Minimum order 100 plants. F.O.B. Shipping Point.

Yoder's New Carnation Cuttings for '52



The "Trialing" Has Been Done For You

Here at our West Chicago greenhouses and in other greenhouses all over the country trials of these new Yoder Carnations have proved conclusively that they are far superior to standard commercial varieties. When you order these Carnations, you needn't consider it an experiment—it's good business. *Midas* (above) is an excellent yellow.

SPECIAL COLLECTIONS

Collection No. 1. 50 cuttings each of 14 Yoder varieties	\$126.00
Collection No. 2. 100 cuttings each of 14 Yoder varieties	\$239.40

WHITE

Jupiter. A large, strong stemmed white. Well received in the Middle West.

Aurora. Another exceptionally large, white flower. Does well in late spring and early fall. A promising variety for the West and South.

Adonis. A winter white. Satisfactory flower quality and good production. This variety is competition for Olivette.

PINK

Apollo. An outstanding salmon pink, larger than Netta. A good summer flower, well suited to all areas of the country. Should become the foremost salmon pink variety grown.

Aphrodite. A clear light pink; outside petals bleach a little in late spring and early fall, but do not burn. A good, early producer with an early comeback, it is at its best in areas of relatively high light intensity.

Diana. Light pink; a good producer.

Venus. A show variety. Extra large, beautiful, long stemmed, salmon pink flower.

ROSE

Minerva. An unusual deep scarlet pink. Reported as a good summer flower—fades in very high light intensity, but fades uniformly with no white edge. Heavy break-back; fine keeper.

We're happy to announce the introduction of these new Carnations—the greatest advancement in Carnation culture to date.

These are the first of a series of Carnations developed by Yoder Bros. of Barberton, Ohio from disease-free seedling strains. They are not disease-resistant, but they are as free of disease as you can get Carnation stock; and given the same care you would give ordinary commercial Carnation varieties, they will give you more quality flowers—more dollars per square foot of bench space than the regular varieties.

You can feel completely free to order these Carnations in quantity as they have been flowered in our own greenhouses and have proved their superiority over standard varieties. But if you're not convinced that these are the best buy in Carnations, try some alongside your standard varieties for comparison.

The demand for these varieties has been heavy—get your order in now to be sure of the quantities and varieties you want. Shipped January thru April 1952. F.O.B. Barberton, Ohio. Minimum order, 50 cuttings of a variety.

RED-SCARLET

Ceres. Because of its beautiful King Cardinal color and its exceptionally high production, this variety is being made available in 1952. Early, with heavy comeback.

Neptune. Scarlet (color resembles that of Wm. Sim); a free breaker, fine stretch. A very satisfactory variety.

MAROON

Vulcan. A fine flower. Excellent keeper, good comeback. Best maroon. Should supersede all varieties now available in this color class.

YELLOW

Midas. A good yellow Carnation. Production very satisfactory. Where Miller's Yellow is a problem, this variety is strongly recommended.

VARIEGATED

Orion. Color resembles that of Glowing Ember. An excellent grower and producer.

Saturn. A beautiful warm bronze variegated; excellent under artificial light. Promises to become a very popular novelty color.

PRICES

	Per 100	Per 100	
50 of a variety....	\$18.00	500-950 of a variety....	\$15.30
100-250 of a variety....	17.10	1000-2450 of a variety..	14.40
300-450 of a variety....	16.20	2500 and up of a variety	13.50

Quantity prices apply to any one variety, only.

As We See Them!

Again in this '52 Ball Mum Guide you will find an offering of the better 1952 novelties. To assist our customers in evaluating these many promising new-comers, we add this "Blue Sheet" giving **our own experience** with many of them. It is added as an insert in this manner to permit inclusion of notes made during our September-October flowerings. The notes are based on trials grown here at West Chicago along with our year-round Mum cut flower program.

Our comments are limited to varieties we flowered—and to the periods during which we flowered them. Included are comments on some of the 1951 novelties which seemed to us outstanding.

We hope you will find it helpful.

Vic Ball

WHITE

Halo. Most pleasing pure white daisy for May thru September. Very popular on Chicago market (\$2.00) in May. Best if cut before pollen grains open.

White Popcorn, sport of Popcorn. A creamy white, but no pink regardless of temperature. A terrific producer, and one you can "cut with a scythe." Excellent thru June, July and August, and for fall cloth house. Stem length medium.

Illini Snowdrift. Outstanding novelty. Pure white "Spider" pompon. Excellent production, even spray and flowering; shades well from June thru October in our trials altho flowers are not as large in early summer as in the fall. Something different. Flowers ship and handle easily.

Highbrow. Our experience limited to September-October flowering. Large, cream pompon with deeper cream center. Looks neat. High production and even flowering habit. Visitors here were about 50-50 either enthused or against it. Try it for September or October.

Snowflurry. What a producer! One spray (no pinch) weighed 4 1/2 oz. A small Pinocchio-type white; not quite as formal or clear white, but 50% more cut. Good thru September-October in our trials. No winter experience here.

Moonglow. We like this one from September 15 thru October, but not before. Pure white.

Dynamo. Clear white pompon. Medium single flower. Pleasing flower and spray in late September-October, but uneven before then in our tests. O.K. for cloth house.

Keepsake. Flowered here (and liked it) thru July-August-September. Some cream cast, but good spray and production. Stands heat.

Encore. There's no better late summer-fall white pompon if it buds up properly. Try it, but not over 2 weeks from pinching to shade—and never below 60° during bud formation. O.K. under cloth. A beauty if well done!

YELLOW

Schneeburg's Daisy. A most pleasing, bright golden yellow daisy. We flowered it thru August-September-October and found it always even, productive, and often called for. No fading.

Golden Chord. In our experience, a very fine, bold, bright yellow pompon for October-November. Not recommended for flowering prior to October 1. Wonderfully fine in its season.

Gregory Ball
INC.
WEST CHICAGO
ILLINOIS



Pippin. Terrific production, good spray form, bright yellow color made this one stand out during our September-October flowering. It seems actually to combine outstanding production with a better than passing grade on all other counts.

Klondike. We found it a quite large, bold, deep golden yellow pompon, long on production, and good even spray—during October, our only flowering of it.

Lollipop. Our late September-October flowering of it produced a fairly small, firm, hard, rounded pompon; lemon yellow and of good spray form. Hard flower and stiff stem means good shipper.

PINK

Grand Slam. In our experience, one of the top novelties of the season. Color about like Mary Ellen Snap or Shell Pink Aster. It is a daisy, wide, stiff petalled, suggesting a small Dahlia. Flowered here thru September-October only; best after mid-September in our trials.

Reward. The best pink daisy from mid-June till fall in our tests. While its "summer color" under glass is lighter than at normal season, it is bright even thru hot spells. Good production, medium stem. O.K. under cloth.

Majorette. A quite deep rose anemone, short habit; ideal for pot culture. As a cut flower we found it quite productive, and of especially good, even spray formation. Flowered during October.

BRONZE and RED

Paragon. Top-notch, extra large, deep bronze pompon, during our October flowering of it. Holds color well, good production, and a fine, open even spray. "XX" in the cloth house, too.

Buckskin. A bright and pleasing tan-bronze daisy that held its color right thru July-August in our trials. Rated good on production; uniformly even, nice spray. Good for late summer cloth house.

Chevron. One of the few bronzes that will hold a usable color under glass during July-August-September. Like Seneca except for "anti-fade." At normal season, it's a much deeper maroon bronze.

Beauregard. A good, rich, tan-bronze from July till fall in our trials. Good yield, nice spray, holds color O.K. under glass.

GEO. J. BALL, INC.

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ILLINOIS**

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IMPORTANT!—To insure your order being shipped on the date you specify, we suggest that you order at least 6 months in advance of delivery date. ABSOLUTELY NO CHANGES ON YOUR ORDER CAN BE ACCEPTED WITHIN 30 DAYS OF DELIVERY DATE. Minimum order 500, 50 of a variety or multiples of 50. Please mark SPECIFIC shipping date.

LIMITATION OF WARRANTY. We, Geo. J. Ball, Inc., warrant, to the extent of the purchase price, that Seeds, Plants or Bulbs sold are as described on the container, within recognized tolerances. We give no other or further warranty, express or implied.

GREENHOUSE VARIETIES

Quantity	Variety	50 per 50	100- 250 per 100	300- 450 per 100	500- 950 per 100	1000- 2450 per 100	2500- up per 100	Amount	Quantity	Variety	50 per 50	100- 250 per 100	300- 450 per 100	500- 950 per 100	1000- 2450 per 100	2500- up per 100	Amount
.....	Acclaim	\$5.00	\$9.50	\$9.00	\$8.50	\$8.00	\$7.50.....		.....	Br. Goldsmith	\$3.25	\$6.15	\$5.85	\$5.50	\$5.20	\$4.85	
.....	Adagio	4.50	8.55	8.10	7.65	7.20	6.75.....		.....	Br. Linda Lou	4.00	7.60	7.20	6.80	6.40	6.00	
.....	Adelaide	2.75	5.20	4.95	4.65	4.40	4.10.....		.....	Br. Masterpiece	2.75	5.20	4.95	4.65	4.40	4.10...	
.....	Admiral	5.00	9.50	9.00	8.50	8.00	7.50.....		.....	Br. Minstrel	4.00	7.60	7.20	6.80	6.40	6.00...	
.....	Albatross	3.00	5.70	5.40	5.10	4.80	4.50.....		.....	Br. Minuet	3.50	6.65	6.30	5.95	5.60	5.25...	
.....	Ambassador	3.00	5.70	5.40	5.10	4.80	4.50.....		.....	Br. Mistletoe	3.25	6.15	5.85	5.50	5.20	4.85...	
.....	Amber Bright	4.00	7.60	7.20	6.80	6.40	6.00.....		.....	Br. Orchid Queen	3.25	6.15	5.85	5.50	5.20	4.85...	
.....	Amberina	5.00	9.50	9.00	8.50	8.00	7.50.....		.....	Br. Princeton	3.25	6.15	5.85	5.50	5.20	4.85...	
.....	Anaconda	2.75	5.20	4.95	4.65	4.40	4.10.....		.....	Br. Riviera	4.00	7.60	7.20	6.80	6.40	6.00...	
.....	Apricot Queen	3.25	6.15	5.85	5.50	5.20	4.85.....		.....	Br. Supreme	3.25	6.15	5.85	5.50	5.20	4.85...	
.....	Apricot Valencia	3.00	5.70	5.40	5.10	4.80	4.50.....		.....	Br. Thysa	4.00	7.60	7.20	6.80	6.40	6.00...	
.....	Arcadia	2.75	5.20	4.95	4.65	4.40	4.10.....		.....	Br. Tuxedo	3.25	6.15	5.85	5.50	5.20	4.85...	
.....	Argonne	4.00	7.60	7.20	6.80	6.40	6.00.....		.....	Buccaneer	5.00	9.50	9.00	8.50	8.00	7.50...	
.....	Aristocrat	3.25	6.15	5.85	5.50	5.20	4.85.....		.....	Buckskin	4.50	8.55	8.10	7.65	7.20	6.75...	
.....	Ballerina	4.00	7.60	7.20	6.80	6.40	6.00.....		.....	Butterball	3.50	6.65	6.30	5.95	5.60	5.25...	
.....	Bamboo	4.50	8.55	8.10	7.65	7.20	6.75.....		.....	Butterscotch	4.00	7.60	7.20	6.80	6.40	6.00...	
.....	Barcarole	2.75	5.20	4.95	4.65	4.40	4.10.....		.....	Calico	4.50	8.55	8.10	7.65	7.20	6.75...	
.....	Beauregard	4.50	8.55	8.10	7.65	7.20	6.75.....		.....	Calif. White Daisy	3.00	5.70	5.40	5.10	4.80	4.50...	
.....	Beautiful Lady	3.00	5.70	5.40	5.10	4.80	4.50.....		.....	Cameo	3.00	5.70	5.40	5.10	4.80	4.50...	
.....	Belray	4.50	8.55	8.10	7.65	7.20	6.75.....		.....	Capt. Cook	2.75	5.20	4.95	4.65	4.40	4.10...	
.....	Betty Rose	3.25	6.15	5.85	5.50	5.20	4.85.....		.....	Caravan	5.00	9.50	9.00	8.50	8.00	7.50...	
.....	Betsy Ross	3.00	5.70	5.40	5.10	4.80	4.50.....		.....	Carolyn Yosick	3.00	5.70	5.40	5.10	4.80	4.50...	
.....	Bittersweet	3.00	5.70	5.40	5.10	4.80	4.50.....		.....	Carousel	4.50	8.55	8.10	7.65	7.20	6.75...	
.....	Blazing Gold	3.00	5.70	5.40	5.10	4.80	4.50.....		.....	Cassandra	3.00	5.70	5.40	5.10	4.80	4.50...	
.....	Blueblood	5.00	9.50	9.00	8.50	8.00	7.50.....		.....	Cavalcade	3.50	6.65	6.30	5.95	5.60	5.25...	
.....	Bojangles	4.50	8.55	8.10	7.65	7.20	6.75.....		.....	Celestra	3.00	5.70	5.40	5.10	4.80	4.50...	
.....	Bonnaffon Deluxe	2.50	4.75	4.50	4.25	4.00	3.75.....		.....	Chalice	5.00	9.50	9.00	8.50	8.00	7.50...	
.....	Bonton	3.25	6.15	5.85	5.50	5.20	4.85.....		.....	Challenge	4.50	8.55	8.10	7.65	7.20	6.75...	
.....	Bourbon	4.00	7.60	7.20	6.80	6.40	6.00.....		.....	Champagne	4.00	7.60	7.20	6.80	6.40	6.00...	
.....	Brandywine	5.00	9.50	9.00	8.50	8.00	7.50.....		.....	Chanticleer	4.50	8.55	8.10	7.65	7.20	6.75...	
.....	Brigadoon	5.00	9.50	9.00	8.50	8.00	7.50.....		.....	Chattanooga	2.75	5.20	4.95	4.65	4.40	4.10...	
.....	Bright Forecast	4.50	8.55	8.10	7.65	7.20	6.75.....		.....	Chevron	4.50	8.55	8.10	7.65	7.20	6.75...	
.....	Brocade	2.75	5.20	4.95	4.65	4.40	4.10.....		.....	Christina	3.50	6.65	6.30	5.95	5.60	5.25...	
.....	Br. Buckingham	2.75	5.20	4.95	4.65	4.40	4.10.....		.....	Christmas Greeting	4.50	8.55	8.10	7.65	7.20	6.75...	
.....	Br. Daisy	3.00	5.70	5.40	5.10	4.80	4.50.....		.....	Christmas Star	3.50	6.65	6.30	5.95	5.60	5.25...	
.....	Br. Dot	2.75	5.20	4.95	4.65	4.40	4.10.....		.....	Cinderella	4.00	7.60	7.20	6.80	6.40	6.00...	
.....	Br. Frick	3.00	5.70	5.40	5.10	4.80	4.50.....		.....	Claret	5.00	9.50	9.00	8.50	8.00	7.50...	

GREENHOUSE VARIETIES

Quan.	Variety	50 per 50	100-250 per 100	300-450 per 100	500-950 per 100	1000-2450 per 100	2500-up per 100	Amount	Quan.	Variety	50 per 50	100-250 per 100	300-450 per 100	500-950 per 100	1000-2450 per 100	2500-up per 100	Amount
	Classic	\$4.50	\$8.55	\$8.10	\$7.65	\$7.20	\$6.75			Garnet King	\$3.25	\$6.15	\$5.85	\$5.50	\$5.20	\$4.85	
	Cocktail	5.00	9.50	9.00	8.50	8.00	7.50			Garza	3.00	5.70	5.40	5.10	4.80	4.50	
	Constellation	3.00	5.70	5.40	5.10	4.80	4.50			Gene Harwood	3.50	6.65	6.30	5.95	5.60	5.25	
	Copperhead	4.50	8.55	8.10	7.65	7.20	6.75			Gladys Pearson	2.75	5.20	4.95	4.65	4.40	4.10	
	Cordova	2.75	5.20	4.95	4.65	4.40	4.10			Glitters	3.25	6.15	5.85	5.50	5.20	4.85	
	Coronet	4.50	8.55	8.10	7.65	7.20	6.75			Gold Braid	5.00	9.50	9.00	8.50	8.00	7.50	
	Corsair	5.00	9.50	9.00	8.50	8.00	7.50			Gold Coast	2.50	4.75	4.50	4.25	4.00	3.75	
	Cotillion	5.00	9.50	9.00	8.50	8.00	7.50			Gold Lode	2.75	5.20	4.95	4.65	4.40	4.10	
	Cotton Top	3.00	5.70	5.40	5.10	4.80	4.50			Goldenrod	5.00	9.50	9.00	8.50	8.00	7.50	
	Courtier	5.00	9.50	9.00	8.50	8.00	7.50			Goldrush	4.50	8.55	8.10	7.65	7.20	6.75	
	Cream Dot	2.75	5.20	4.95	4.65	4.40	4.10			Goldtone	4.50	8.55	8.10	7.65	7.20	6.75	
	Crescendo	4.50	8.55	8.10	7.65	7.20	6.75			Golden Anniversary	3.50	6.65	6.30	5.95	5.60	5.25	
	Crimson Valencia	4.00	7.60	7.20	6.80	6.40	6.00			Golden Chord	4.00	7.60	7.20	6.80	6.40	6.00	
	Crystal Beauty	4.00	7.60	7.20	6.80	6.40	6.00			Golden Glory	3.25	6.15	5.85	5.50	5.20	4.85	
	Dk. Br. Masterpiece	4.00	7.60	7.20	6.80	6.40	6.00			Golden Harvest	4.00	7.60	7.20	6.80	6.40	6.00	
	Dk. Bulkeley	3.25	6.15	5.85	5.50	5.20	4.85			Golden Herald	3.00	5.70	5.40	5.10	4.80	4.50	
	Dk. Enchantress	4.00	7.60	7.20	6.80	6.40	6.00			Golden Jane	3.00	5.70	5.40	5.10	4.80	4.50	
	Dk. Ind. Yellow	3.50	6.65	6.30	5.95	5.60	5.25			Golden Mensa	3.00	5.70	5.40	5.10	4.80	4.50	
	Dk. Linda Lou	2.75	5.20	4.95	4.65	4.40	4.10			Golden Mistletoe	3.25	6.15	5.85	5.50	5.20	4.85	
	Dk. Orchid Queen	3.25	6.15	5.85	5.50	5.20	4.85			Golden Mrs. Ross	2.75	5.20	4.95	4.65	4.40	4.10	
	Dk. Pk. Dot	2.75	5.20	4.95	4.65	4.40	4.10			Golden Pearson	2.75	5.20	4.95	4.65	4.40	4.10	
	Dk. Jewell	3.00	5.70	5.40	5.10	4.80	4.50			Goldsmith	3.25	6.15	5.85	5.50	5.20	4.85	
	Dk. Norma	3.25	6.15	5.85	5.50	5.20	4.85			Good News	3.25	6.15	5.85	5.50	5.20	4.85	
	Dk. Riviera	3.50	6.65	6.30	5.95	5.60	5.25			Grand Slam	5.00	9.50	9.00	8.50	8.00	7.50	
	Dk. Pk. Supreme	3.25	6.15	5.85	5.50	5.20	4.85			Granite State	2.75	5.20	4.95	4.65	4.40	4.10	
	Dk. Valencia	3.00	5.70	5.40	5.10	4.80	4.50			Gypsy	2.75	5.20	4.95	4.65	4.40	4.10	
	Dauntless	3.50	6.65	6.30	5.95	5.60	5.25			Halo	4.50	8.55	8.10	7.65	7.20	6.75	
	Dazzler	5.00	9.50	9.00	8.50	8.00	7.50			Harlequin	5.00	9.50	9.00	8.50	8.00	7.50	
	Debonair	3.00	5.70	5.40	5.10	4.80	4.50			Harvester	3.00	5.70	5.40	5.10	4.80	4.50	
	Debutante	4.50	8.55	8.10	7.65	7.20	6.75			Harvest Golden	4.00	7.60	7.20	6.80	6.40	6.00	
	Dec. Glory	3.00	5.70	5.40	5.10	4.80	4.50			Hasegawa Pink	2.50	4.75	4.50	4.25	4.00	3.75	
	Dec. Gold	3.00	5.70	5.40	5.10	4.80	4.50			Heirloom	4.50	8.55	8.10	7.65	7.20	6.75	
	Dec. White	3.25	6.15	5.85	5.50	5.20	4.85			Helen Frick	3.00	5.70	5.40	5.10	4.80	4.50	
	Defiance	4.00	7.60	7.20	6.80	6.40	6.00			Heritage	5.00	9.50	9.00	8.50	8.00	7.50	
	Detroit News	3.25	6.15	5.85	5.50	5.20	4.85			Highbrow	4.50	8.55	8.10	7.65	7.20	6.75	
	Detroiter	4.00	7.60	7.20	6.80	6.40	6.00			Highlander	5.00	9.50	9.00	8.50	8.00	7.50	
	Dreamboat	3.00	5.70	5.40	5.10	4.80	4.50			Hilda Bergen	3.25	6.15	5.85	5.50	5.20	4.85	
	Dream Girl	4.00	7.60	7.20	6.80	6.40	6.00			Holiday	4.00	7.60	7.20	6.80	6.40	6.00	
	Dynamo	5.00	9.50	9.00	8.50	8.00	7.50			Honey Dew	3.25	6.15	5.85	5.50	5.20	4.85	
	Ecstasy	2.75	5.20	4.95	4.65	4.40	4.10			Horizon	5.00	9.50	9.00	8.50	8.00	7.50	
	Edith Roberts	3.50	6.65	6.30	5.95	5.60	5.25			Illini Bountiful	4.00	7.60	7.20	6.80	6.40	6.00	
	Ed. Seidewitz	3.00	5.70	5.40	5.10	4.80	4.50			Illini Brave	4.00	7.60	7.20	6.80	6.40	6.00	
	Enchantress	3.25	6.15	5.85	5.50	5.20	4.85			Illini Burma	5.00	9.50	9.00	8.50	8.00	7.50	
	Encore	4.00	7.60	7.20	6.80	6.40	6.00			Illini Camille	4.50	8.55	8.10	7.65	7.20	6.75	
	Eskimo	5.00	9.50	9.00	8.50	8.00	7.50			Illini Gold	3.25	6.15	5.85	5.50	5.20	4.85	
	Europa	4.00	7.60	7.20	6.80	6.40	6.00			Illini Goldcup	4.50	8.55	8.10	7.65	7.20	6.75	
	Falcon	4.50	8.55	8.10	7.65	7.20	6.75			Illini Honey	4.00	7.60	7.20	6.80	6.40	6.00	
	Fashion	4.50	8.55	8.10	7.65	7.20	6.75			Illini Redhead	4.00	7.60	7.20	6.80	6.40	6.00	
	Festival	4.00	7.60	7.20	6.80	6.40	6.00			Illini Rye	5.00	9.50	9.00	8.50	8.00	7.50	
	Firebird	2.75	5.20	4.95	4.65	4.40	4.10			Illini Snowdrift	4.00	7.60	7.20	6.80	6.40	6.00	
	Firecracker	5.00	9.50	9.00	8.50	8.00	7.50			Illini Starburst	4.50	8.55	8.10	7.65	7.20	6.75	
	Firefly	4.50	8.55	8.10	7.65	7.20	6.75			Illini Warrior	4.00	7.60	7.20	6.80	6.40	6.00	
	Fireside	4.50	8.55	8.10	7.65	7.20	6.75			Ind. Bronze	3.00	5.70	5.40	5.10	4.80	4.50	
	Forty Niner	4.00	7.60	7.20	6.80	6.40	6.00			Ind. Golden Bronze	5.00	9.50	9.00	8.50	8.00	7.50	
	Fortune	4.50	8.55	8.10	7.65	7.20	6.75			Ind. Pink	3.00	5.70	5.40	5.10	4.80	4.50	
	Freida	3.00	5.70	5.40	5.10	4.80	4.50			Ind. White	3.00	5.70	5.40	5.10	4.80	4.50	
	Friendly Rival	3.00	5.70	5.40	5.10	4.80	4.50			Ind. Yellow	3.00	5.70	5.40	5.10	4.80	4.50	
	Galaxy	4.00	7.60	7.20	6.80	6.40	6.00			Indian Head	4.50	8.55	8.10	7.65	7.20	6.75	
	Garland	5.00	9.50	9.00	8.50	8.00	7.50			Irene	2.75	5.20	4.95	4.65	4.40	4.10	



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LIMITATION OF WARRANTY. We, Geo. J. Ball, Inc., warrant, to the extent of the purchase price, that Seeds, Plants or Bulbs sold are as described on the container, within recognized tolerances. We give no other or further warranty, express or implied.

GREENHOUSE VARIETIES

Quantity	Variety	50 per 50	100- 250 per 100	300- 450 per 100	500- 950 per 100	1000- 2450 per 100	2500- up per 100	Amount	Quantity	Variety	50 per 50	100- 250 per 100	300- 450 per 100	500- 950 per 100	1000- 2450 per 100	2500- up per 100	Amount
	Acclaim	\$5.00	\$9.50	\$9.00	\$8.50	\$8.00	\$7.50			Br. Goldsmith	\$3.25	\$6.15	\$5.85	\$5.50	\$5.20	\$4.85	
	Adagio	4.50	8.55	8.10	7.65	7.20	6.75			Br. Linda Lou	4.00	7.60	7.20	6.80	6.40	6.00	
	Adelaide	2.75	5.20	4.95	4.65	4.40	4.10			Br. Masterpiece	2.75	5.20	4.95	4.65	4.40	4.10	
	Admiral	5.00	9.50	9.00	8.50	8.00	7.50			Br. Minstrel	4.00	7.60	7.20	6.80	6.40	6.00	
	Albatross	3.00	5.70	5.40	5.10	4.80	4.50			Br. Minuet	3.50	6.65	6.30	5.95	5.60	5.25	
	Ambassador	3.00	5.70	5.40	5.10	4.80	4.50			Br. Mistletoe	3.25	6.15	5.85	5.50	5.20	4.85	
	Amber Bright	4.00	7.60	7.20	6.80	6.40	6.00			Br. Orchid Queen	3.25	6.15	5.85	5.50	5.20	4.85	
	Amberina	5.00	9.50	9.00	8.50	8.00	7.50			Br. Princeton	3.25	6.15	5.85	5.50	5.20	4.85	
	Anaconda	2.75	5.20	4.95	4.65	4.40	4.10			Br. Riviera	4.00	7.60	7.20	6.80	6.40	6.00	
	Apricot Queen	3.25	6.15	5.85	5.50	5.20	4.85			Br. Supreme	3.25	6.15	5.85	5.50	5.20	4.85	
	Apricot Valencia	3.00	5.70	5.40	5.10	4.80	4.50			Br. Thyra	4.00	7.60	7.20	6.80	6.40	6.00	
	Arcadia	2.75	5.20	4.95	4.65	4.40	4.10			Br. Tuxedo	3.25	6.15	5.85	5.50	5.20	4.85	
	Argonne	4.00	7.60	7.20	6.80	6.40	6.00			Buccaneer	5.00	9.50	9.00	8.50	8.00	7.50	
	Aristocrat	3.25	6.15	5.85	5.50	5.20	4.85			Buckskin	4.50	8.55	8.10	7.65	7.20	6.75	
	Ballerina	4.00	7.60	7.20	6.80	6.40	6.00			Butterball	3.50	6.65	6.30	5.95	5.60	5.25	
	Bamboo	4.50	8.55	8.10	7.65	7.20	6.75			Butterscotch	4.00	7.60	7.20	6.80	6.40	6.00	
	Barcarole	2.75	5.20	4.95	4.65	4.40	4.10			Calico	4.50	8.55	8.10	7.65	7.20	6.75	
	Beauregard	4.50	8.55	8.10	7.65	7.20	6.75			Calif. White Daisy	3.00	5.70	5.40	5.10	4.80	4.50	
	Beautiful Lady	3.00	5.70	5.40	5.10	4.80	4.50			Cameo	3.00	5.70	5.40	5.10	4.80	4.50	
	Belray	4.50	8.55	8.10	7.65	7.20	6.75			Capt. Cook	2.75	5.20	4.95	4.65	4.40	4.10	
	Betty Rose	3.25	6.15	5.85	5.50	5.20	4.85			Caravan	5.00	9.50	9.00	8.50	8.00	7.50	
	Betsy Ross	3.00	5.70	5.40	5.10	4.80	4.50			Carolyn Yosick	3.00	5.70	5.40	5.10	4.80	4.50	
	Bittersweet	3.00	5.70	5.40	5.10	4.80	4.50			Carousel	4.50	8.55	8.10	7.65	7.20	6.75	
	Blazing Gold	3.00	5.70	5.40	5.10	4.80	4.50			Cassandra	3.00	5.70	5.40	5.10	4.80	4.50	
	Blueblood	5.00	9.50	9.00	8.50	8.00	7.50			Cavalcade	3.50	6.65	6.30	5.95	5.60	5.25	
	Bojangles	4.50	8.55	8.10	7.65	7.20	6.75			Celestra	3.00	5.70	5.40	5.10	4.80	4.50	
	Bonnafon Deluxe	2.50	4.75	4.50	4.25	4.00	3.75			Chalice	5.00	9.50	9.00	8.50	8.00	7.50	
	Bonton	3.25	6.15	5.85	5.50	5.20	4.85			Challenge	4.50	8.55	8.10	7.65	7.20	6.75	
	Bourbon	4.00	7.60	7.20	6.80	6.40	6.00			Champagne	4.00	7.60	7.20	6.80	6.40	6.00	
	Brandywine	5.00	9.50	9.00	8.50	8.00	7.50			Chanticleer	4.50	8.55	8.10	7.65	7.20	6.75	
	Brigadoon	5.00	9.50	9.00	8.50	8.00	7.50			Chattanooga	2.75	5.20	4.95	4.65	4.40	4.10	
	Bright Forecast	4.50	8.55	8.10	7.65	7.20	6.75			Chevron	4.50	8.55	8.10	7.65	7.20	6.75	
	Brocade	2.75	5.20	4.95	4.65	4.40	4.10			Christina	3.50	6.65	6.30	5.95	5.60	5.25	
	Br. Buckingham	2.75	5.20	4.95	4.65	4.40	4.10			Christmas Greeting	4.50	8.55	8.10	7.65	7.20	6.75	
	Br. Daisy	3.00	5.70	5.40	5.10	4.80	4.50			Christmas Star	3.50	6.65	6.30	5.95	5.60	5.25	
	Br. Dot	2.75	5.20	4.95	4.65	4.40	4.10			Cinderella	4.00	7.60	7.20	6.80	6.40	6.00	
	Br. Frick	3.00	5.70	5.40	5.10	4.80	4.50			Claret	5.00	9.50	9.00	8.50	8.00	7.50	

GREENHOUSE VARIETIES

Quan.	Variety	50	100-	300-	500-	1000-	2500-	Quan.	Variety	50	100-	300-	500-	1000-	2500-
		per 50	250 per 100	450 per 100	950 per 100	2450 per 100	up per 100			per 50	250 per 100	450 per 100	950 per 100	2450 per 100	up per 100	Amount
	Renown	\$4.50	\$8.55	\$8.10	\$7.65	\$7.20	\$6.75.....		Sunray	\$2.50	\$4.75	\$4.50	\$4.25	\$4.00	\$3.75.....
	Rev. Bushnell	3.25	6.15	5.85	5.50	5.20	4.85.....		Sunrise	5.00	9.50	9.00	8.50	8.00	7.50.....
	Revelation	2.50	4.75	4.50	4.25	4.00	3.75.....		Sunup	5.00	9.50	9.00	8.50	8.00	7.50.....
	Revelry	5.00	9.50	9.00	8.50	8.00	7.50.....		Susanne Miller	3.25	6.15	5.85	5.50	5.20	4.85.....
	Reward	4.50	8.55	8.10	7.65	7.20	6.75.....		Swan	3.50	6.65	6.30	5.95	5.60	5.25.....
	Richard Mandel	3.00	5.70	5.40	5.10	4.80	4.50.....		Sweepstake	4.50	8.55	8.10	7.65	7.20	6.75.....
	Riviera	3.00	5.70	5.40	5.10	4.80	4.50.....		Sweetheart	4.50	8.55	8.10	7.65	7.20	6.75.....
	Robinhue	4.50	8.55	8.10	7.65	7.20	6.75.....		Sylvanna	3.00	5.70	5.40	5.10	4.80	4.50.....
	Rodell Improved	2.50	4.75	4.50	4.25	4.00	3.75.....		Symmetry	5.00	9.50	9.00	8.50	8.00	7.50.....
	Rosalind	2.75	5.20	4.95	4.65	4.40	4.10.....		Taffeta	4.50	8.55	8.10	7.65	7.20	6.75.....
	Rose Delight	4.00	7.60	7.20	6.80	6.40	6.00.....		Tally-Ho	3.50	6.65	6.30	5.95	5.60	5.25.....
	Rose Masterpiece	3.50	6.65	6.30	5.95	5.60	5.25.....		Thanks. Pink	3.00	5.70	5.40	5.10	4.80	4.50.....
	Rubicon	4.00	7.60	7.20	6.80	6.40	6.00.....		Thelma	5.00	9.50	9.00	8.50	8.00	7.50.....
	Ruffled Supreme	3.25	6.15	5.85	5.50	5.20	4.85.....		The Titan	3.25	6.15	5.85	5.50	5.20	4.85.....
	Rusticon	3.00	5.70	5.40	5.10	4.80	4.50.....		Thorobred	5.00	9.50	9.00	8.50	8.00	7.50.....
	Salmon Masterpiece	3.50	6.65	6.30	5.95	5.60	5.25.....		Thyra	3.00	5.70	5.40	5.10	4.80	4.50.....
	Salmon Valencia	5.00	9.50	9.00	8.50	8.00	7.50.....		Tobin's Yellow	3.25	6.15	5.85	5.50	5.20	4.85.....
	Salute	4.50	8.55	8.10	7.65	7.20	6.75.....		Topaz	5.00	9.50	9.00	8.50	8.00	7.50.....
	Samovar	4.00	7.60	7.20	6.80	6.40	6.00.....		Treasure	5.00	9.50	9.00	8.50	8.00	7.50.....
	Sarong	3.25	6.15	5.85	5.50	5.20	4.85.....		Tuxedo	3.25	6.15	5.85	5.50	5.20	4.85.....
	Satellite	5.00	9.50	9.00	8.50	8.00	7.50.....		Usona	2.75	5.20	4.95	4.65	4.40	4.10.....
	Sch. Daisy	4.00	7.60	7.20	6.80	6.40	6.00.....		Valencia	3.00	5.70	5.40	5.10	4.80	4.50.....
	Schweizerland	4.00	7.60	7.20	6.80	6.40	6.00.....		Vesper	2.75	5.20	4.95	4.65	4.40	4.10.....
	Sculpture	5.00	9.50	9.00	8.50	8.00	7.50.....		Vibrant	3.00	5.70	5.40	5.10	4.80	4.50.....
	Seafoam	2.75	5.20	4.95	4.65	4.40	4.10.....		Vivacious Lady	5.00	9.50	9.00	8.50	8.00	7.50.....
	Seagull	2.75	5.20	4.95	4.65	4.40	4.10.....		Waikiki	3.50	6.65	6.30	5.95	5.60	5.25.....
	Seneca	3.25	6.15	5.85	5.50	5.20	4.85.....		W. H. Buckingham	2.75	5.20	4.95	4.65	4.40	4.10.....
	Sequin	4.50	8.55	8.10	7.65	7.20	6.75.....		Wh. Anemone	3.25	6.15	5.85	5.50	5.20	4.85.....
	Serenade	4.50	8.55	8.10	7.65	7.20	6.75.....		Wh. Chief	3.50	6.65	6.30	5.95	5.60	5.25.....
	Shalimar	5.00	9.50	9.00	8.50	8.00	7.50.....		Wh. Doty	2.75	5.20	4.95	4.65	4.40	4.10.....
	Shamrock	4.50	8.55	8.10	7.65	7.20	6.75.....		Wh. Freida	3.00	5.70	5.40	5.10	4.80	4.50.....
	Shasta	2.75	5.20	4.95	4.65	4.40	4.10.....		Wh. Frick	3.00	5.70	5.40	5.10	4.80	4.50.....
	Shasta Daisy	2.75	5.20	4.95	4.65	4.40	4.10.....		Wh. Mensa	3.00	5.70	5.40	5.10	4.80	4.50.....
	Silver Ball	2.50	4.75	4.50	4.25	4.00	3.75.....		Wh. Mistletoe	3.25	6.15	5.85	5.50	5.20	4.85.....
	Silverplate	4.50	8.55	8.10	7.65	7.20	6.75.....		Wh. Norma	3.25	6.15	5.85	5.50	5.20	4.85.....
	Silver Sheen	2.75	5.20	4.95	4.65	4.40	4.10.....		Wh. Pockett	3.25	6.15	5.85	5.50	5.20	4.85.....
	Silversmith	4.00	7.60	7.20	6.80	6.40	6.00.....		White Popcorn	5.00	9.50	9.00	8.50	8.00	7.50.....
	Siren	4.50	8.55	8.10	7.65	7.20	6.75.....		Wh. Rayonnante	3.25	6.15	5.85	5.50	5.20	4.85.....
	Sm. Late White	3.25	6.15	5.85	5.50	5.20	4.85.....		Wh. Supreme	3.25	6.15	5.85	5.50	5.20	4.85.....
	Sm. Superlative	3.25	6.15	5.85	5.50	5.20	4.85.....		Wh. Usona	3.50	6.65	6.30	5.95	5.60	5.25.....
	Snow	2.75	5.20	4.95	4.65	4.40	4.10.....		Wh. Valencia	4.00	7.60	7.20	6.80	6.40	6.00.....
	Snowcap	4.00	7.60	7.20	6.80	6.40	6.00.....		Wh. Yuletide	2.75	5.20	4.95	4.65	4.40	4.10.....
	Snow Cloud	3.00	5.70	5.40	5.10	4.80	4.50.....		Wilson's White	5.00	9.50	9.00	8.50	8.00	7.50.....
	Snowcrest	4.00	7.60	7.20	6.80	6.40	6.00.....		Witchery	4.50	8.55	8.10	7.65	7.20	6.75.....
	Snowdrop	5.00	9.50	9.00	8.50	8.00	7.50.....		Yel. Ambassador	3.00	5.70	5.40	5.10	4.80	4.50.....
	Snowflurry	4.50	8.55	8.10	7.65	7.20	6.75.....		Yel. Arcadia	2.75	5.20	4.95	4.65	4.40	4.10.....
	Snowline	4.50	8.55	8.10	7.65	7.20	6.75.....		Yel. Beauty	3.25	6.15	5.85	5.50	5.20	4.85.....
	Snow Queen	5.00	9.50	9.00	8.50	8.00	7.50.....		Yel. Bergen	3.25	6.15	5.85	5.50	5.20	4.85.....
	Snow White	2.75	5.20	4.95	4.65	4.40	4.10.....		Yel. Cameo	3.00	5.70	5.40	5.10	4.80	4.50.....
	Songster	4.50	8.55	8.10	7.65	7.20	6.75.....		Yel. Cassandra	4.00	7.60	7.20	6.80	6.40	6.00.....
	Soprano	4.00	7.60	7.20	6.80	6.40	6.00.....		Yel. Chattanooga	2.75	5.20	4.95	4.65	4.40	4.10.....
	Spangles	4.50	8.55	8.10	7.65	7.20	6.75.....		Yel. Chief	2.75	5.20	4.95	4.65	4.40	4.10.....
	Starbright	4.00	7.60	7.20	6.80	6.40	6.00.....		Yel. Cordova	2.75	5.20	4.95	4.65	4.40	4.10.....
	Sterling	4.00	7.60	7.20	6.80	6.40	6.00.....		Yel. Daisy	3.00	5.70	5.40	5.10	4.80	4.50.....
	Sue Scilly Jones	3.50	6.65	6.30	5.95	5.60	5.25.....		Yel. Dot	2.75	5.20	4.95	4.65	4.40	4.10.....
	Sugar Plum	4.50	8.55	8.10	7.65	7.20	6.75.....		Yel. Doty	2.75	5.20	4.95	4.65	4.40	4.10.....
	Sunglow	2.50	4.75	4.50	4.25	4.00	3.75.....		Yel. Fellow	2.75	5.20	4.95	4.65	4.40	4.10.....
	Sun Gold	3.00	5.70	5.40	5.10	4.80	4.50.....		Yel. Firebird	3.25	6.15	5.85	5.50	5.20	4.85.....
	Sunnyside	2.75	5.20	4.95	4.65	4.40	4.10.....		Yel. Irene	2.75	5.20	4.95	4.65	4.40	4.10.....

GREENHOUSE VARIETIES

Quan.	Variety	50	100-	300-	500-	1000-	2500-	100- up per 100 Amount	Quan.	Variety	50	100-	300-	500-	1000-	2500-
		per 50	250 per 100	450 per 100	950 per 100	2450 per 100	up per 100			per 50	450 per 100	950 per 100	2450 per 100	up per 100	Amount	
	Ivanhoe	\$3.25	\$6.15	\$5.85	\$5.50	\$5.20	\$4.85.....		Moonglow	\$4.00	\$7.60	\$7.20	\$6.80	\$6.40	\$6.00.....	
	Ivory Cameo	3.50	6.65	6.30	5.95	5.60	5.25.....		Mrs. Dewey	4.50	8.55	8.10	7.65	7.20	6.75.....	
	Jack-Pot	5.00	9.50	9.00	8.50	8.00	7.50.....		Mrs. Kidder	2.50	4.75	4.50	4.25	4.00	3.75.....	
	Jamboree	4.50	8.55	8.10	7.65	7.20	6.75.....		Mrs. R. A. Walker	3.50	6.65	6.30	5.95	5.60	5.25.....	
	James Stewart	4.50	8.55	8.10	7.65	7.20	6.75.....		Mrs. Roy	3.25	6.15	5.85	5.50	5.20	4.85.....	
	Jean Elizabeth	3.25	6.15	5.85	5.50	5.20	4.85.....		Mrs. Stachelin	3.50	6.65	6.30	5.95	5.60	5.25.....	
	Jemima	2.75	5.20	4.95	4.65	4.40	4.10.....		Muto's Crimson	4.00	7.60	7.20	6.80	6.40	6.00.....	
	Jessie	2.75	5.20	4.95	4.65	4.40	4.10.....		Navaho	3.00	5.70	5.40	5.10	4.80	4.50.....	
	Jewell	3.00	5.70	5.40	5.10	4.80	4.50.....		Nevada	3.00	5.70	5.40	5.10	4.80	4.50.....	
	Joybringer	4.50	8.55	8.10	7.65	7.20	6.75.....		Nocturne	4.50	8.55	8.10	7.65	7.20	6.75.....	
	Kay Tashima	3.50	6.65	6.30	5.95	5.60	5.25.....		Nokomis	4.50	8.55	8.10	7.65	7.20	6.75.....	
	Keepsake	5.00	9.50	9.00	8.50	8.00	7.50.....		Nomago	5.00	9.50	9.00	8.50	8.00	7.50.....	
	Klondike	4.50	8.55	8.10	7.65	7.20	6.75.....		Norma	3.25	6.15	5.85	5.50	5.20	4.85.....	
	Kolowa	4.50	8.55	8.10	7.65	7.20	6.75.....		Norona	5.00	9.50	9.00	8.50	8.00	7.50.....	
	Lakme	3.50	6.65	6.30	5.95	5.60	5.25.....		Nosegay	5.00	9.50	9.00	8.50	8.00	7.50.....	
	Lassie	5.00	9.50	9.00	8.50	8.00	7.50.....		Nuggets	2.50	4.75	4.50	4.25	4.00	3.75.....	
	Legal Tender	2.50	4.75	4.50	4.25	4.00	3.75.....		Oakdale	4.50	8.55	8.10	7.65	7.20	6.75.....	
	Lemonade	4.50	8.55	8.10	7.65	7.20	6.75.....		Oak Leaf	2.75	5.20	4.95	4.65	4.40	4.10.....	
	Lillian Doty	2.75	5.20	4.95	4.65	4.40	4.10.....		October Bronze	3.25	6.15	5.85	5.50	5.20	4.85.....	
	Little America	2.50	4.75	4.50	4.25	4.00	3.75.....		October Pink	3.25	6.15	5.85	5.50	5.20	4.85.....	
	Linda Lou	2.75	5.20	4.95	4.65	4.40	4.10.....		Omega	3.00	5.70	5.40	5.10	4.80	4.50.....	
	Lollipop	4.50	8.55	8.10	7.65	7.20	6.75.....		Orchid Beauty	2.75	5.20	4.95	4.65	4.40	4.10.....	
	L. I. Beauty	2.50	4.75	4.50	4.25	4.00	3.75.....		Orchid Queen	3.25	6.15	5.85	5.50	5.20	4.85.....	
	Lorraine	4.00	7.60	7.20	6.80	6.40	6.00.....		Orchid Valencia	5.00	9.50	9.00	8.50	8.00	7.50.....	
	Lulabel	3.50	6.65	6.30	5.95	5.60	5.25.....		Pandora	5.00	9.50	9.00	8.50	8.00	7.50.....	
	Lyric	5.00	9.50	9.00	8.50	8.00	7.50.....		Pageantry	4.50	8.55	8.10	7.65	7.20	6.75.....	
	Madonna	5.00	9.50	9.00	8.50	8.00	7.50.....		Paragon	4.50	8.55	8.10	7.65	7.20	6.75.....	
	Magician	4.50	8.55	8.10	7.65	7.20	6.75.....		Paramount	4.50	8.55	8.10	7.65	7.20	6.75.....	
	Mahogany Viking	3.50	6.65	6.30	5.95	5.60	5.25.....		Peggy Ann Hoover	3.50	6.65	6.30	5.95	5.60	5.25.....	
	Major Bowes	3.00	5.70	5.40	5.10	4.80	4.50.....		Pk. Calif. Daisy	3.50	6.65	6.30	5.95	5.60	5.25.....	
	Majorette	4.50	8.55	8.10	7.65	7.20	6.75.....		Pink Chief	2.75	5.20	4.95	4.65	4.40	4.10.....	
	Mamoru	3.00	5.70	5.40	5.10	4.80	4.50.....		Pk. Dot	2.75	5.20	4.95	4.65	4.40	4.10.....	
	Margaret Moeller	3.00	5.70	5.40	5.10	4.80	4.50.....		Pk. L. I. Beauty	4.00	7.60	7.20	6.80	6.40	6.00.....	
	Marie De Petris	3.00	5.70	5.40	5.10	4.80	4.50.....		Pk. Mistletoe	3.25	6.15	5.85	5.50	5.20	4.85.....	
	Marionette	4.50	8.55	8.10	7.65	7.20	6.75.....		Pk. Pockett	3.25	6.15	5.85	5.50	5.20	4.85.....	
	Marketeer	3.00	5.70	5.40	5.10	4.80	4.50.....		Pk. Sprite	4.00	7.60	7.20	6.80	6.40	6.00.....	
	Mary Garden	4.50	8.55	8.10	7.65	7.20	6.75.....		Pk. Treasure Island	2.50	4.75	4.50	4.25	4.00	3.75.....	
	Mary Gold	2.50	4.75	4.50	4.25	4.00	3.75.....		Pinky	4.50	8.55	8.10	7.65	7.20	6.75.....	
	Mary L. Hall	2.50	4.75	4.50	4.25	4.00	3.75.....		Pinocchio	2.75	5.20	4.95	4.65	4.40	4.10.....	
	Mary McArthur	3.50	6.65	6.30	5.95	5.60	5.25.....		Pippin	5.00	9.50	9.00	8.50	8.00	7.50.....	
	Mason's Bronze	3.25	6.15	5.85	5.50	5.20	4.85.....		Pixie	3.25	6.15	5.85	5.50	5.20	4.85.....	
	Mason's Red	3.25	6.15	5.85	5.50	5.20	4.85.....		Poinsettia	5.00	9.50	9.00	8.50	8.00	7.50.....	
	Mason's Yellow	3.25	6.15	5.85	5.50	5.20	4.85.....		Popcorn	4.00	7.60	7.20	6.80	6.40	6.00.....	
	Masquerade	3.50	6.65	6.30	5.95	5.60	5.25.....		Princess	5.00	9.50	9.00	8.50	8.00	7.50.....	
	Masterpiece	2.75	5.20	4.95	4.65	4.40	4.10.....		Princeton	3.25	6.15	5.85	5.50	5.20	4.85.....	
	Matchless	3.00	5.70	5.40	5.10	4.80	4.50.....		Priscilla	3.00	5.70	5.40	5.10	4.80	4.50.....	
	Medallion	4.50	8.55	8.10	7.65	7.20	6.75.....		Pristine	4.00	7.60	7.20	6.80	6.40	6.00.....	
	Mefo	3.00	5.70	5.40	5.10	4.80	4.50.....		Purdue	4.00	7.60	7.20	6.80	6.40	6.00.....	
	Memorial	5.00	9.50	9.00	8.50	8.00	7.50.....		Queen's Lace	4.00	7.60	7.20	6.80	6.40	6.00.....	
	Mermaid	5.00	9.50	9.00	8.50	8.00	7.50.....		Queen of Pinks	2.75	5.20	4.95	4.65	4.40	4.10.....	
	Merrymaker	4.00	7.60	7.20	6.80	6.40	6.00.....		Rajah	5.00	9.50	9.00	8.50	8.00	7.50.....	
	Meteore	3.25	6.15	5.85	5.50	5.20	4.85.....		Rayonnante	3.25	6.15	5.85	5.50	5.20	4.85.....	
	Minong	2.50	4.75	4.50	4.25	4.00	3.75.....		Red Daisy	3.25	6.15	5.85	5.50	5.20	4.85.....	
	Minstrel	3.50	6.65	6.30	5.95	5.60	5.25.....		Red Dot	3.50	6.65	6.30	5.95	5.60	5.25.....	
	Minuet	3.00	5.70	5.40	5.10	4.80	4.50.....		Red Princeton	3.25	6.15	5.85	5.50	5.20	4.85.....	
	Miss Clarinda	5.00	9.50	9.00	8.50	8.00	7.50.....		Red Rolinda	3.00	5.70	5.40	5.10	4.80	4.50.....	
	Mollie Nicholson	4.00	7.60	7.20	6.80	6.40	6.00.....		Red Rust	3.00	5.70	5.40	5.10	4.80	4.50.....	
	Monarch	5.00	9.50	9.00	8.50	8.00	7.50.....		Red Seneca	4.00	7.60	7.20	6.80	6.40	6.00.....	
	Monument	3.00	5.70	5.40	5.10	4.80	4.50.....		Red Supreme	4.00	7.60	7.20	6.80	6.40	6.00.....	

GREENHOUSE VARIETIES

Quan.	Variety	50 per 50	100-250 per 100	300-450 per 100	500-950 per 100	1000-2450 per 100	2500-up per 100	Amount	Quan.	Variety	50 per 50	100-250 per 100	300-450 per 100	500-950 per 100	1000-2450 per 100	2500-up per 100	Amount
.....	Yel. Lace	\$4.00	\$7.60	\$7.20	\$6.80	\$6.40	\$6.00.....		Yel. Sea Gull	\$2.75	\$5.20	\$4.95	\$4.65	\$4.40	\$4.10.....	
.....	Yel. L. I. Beauty	4.00	7.60	7.20	6.80	6.40	6.00.....	.....	Yel. Shasta	2.75	5.20	4.95	4.65	4.40	4.10.....	
.....	Yel. Mefo	3.00	5.70	5.40	5.10	4.80	4.50.....	.....	Yel. Snow	2.75	5.20	4.95	4.65	4.40	4.10.....	
.....	Yellow Moeller	3.50	6.65	6.30	5.95	5.60	5.25.....	.....	Yel. Snowcrest	5.00	9.50	9.00	8.50	8.00	7.50.....	
.....	Yel. Monument	3.00	5.70	5.40	5.10	4.80	4.50.....	.....	Yel. Supreme	3.25	6.15	5.85	5.50	5.20	4.85.....	
.....	Yel. Nevada	3.00	5.70	5.40	5.10	4.80	4.50.....	.....	Yel. Swan	3.50	6.65	6.30	5.95	5.60	5.25.....	
.....	Yel. Pockett	3.25	6.15	5.85	5.50	5.20	4.85.....	.....	Yel. Usona	4.00	7.60	7.20	6.80	6.40	6.00.....	
.....	Yel. Priscilla	5.00	9.50	9.00	8.50	8.00	7.50.....	.....	Yel. Valencia	3.00	5.70	5.40	5.10	4.80	4.50.....	
.....	Yel. Queen	3.25	6.15	5.85	5.50	5.20	4.85.....	.....	Yolanda	2.50	4.75	4.50	4.25	4.00	3.75.....	
.....	Yel. Revelation	3.50	6.65	6.30	5.95	5.60	5.25.....	.....	Yukon	2.75	5.20	4.95	4.65	4.40	4.10.....	
.....	Yel. Riviera	4.00	7.60	7.20	6.80	6.40	6.00.....	.....	Yuleflame	3.50	6.65	6.30	5.95	5.60	5.25.....	
.....	Yel. Rolinda	3.00	5.70	5.40	5.10	4.80	4.50.....										

GARDEN (Hardy) VARIETIES

Quantity	Variety	50 per 50	100-250 per 100	300-450 per 100	500-up per 100	Amount	Quantity	Variety	50 per 50	100-250 per 100	300-450 per 100	500-up per 100	Amount
.....	Achievement	\$3.25	\$6.15	\$5.85	\$5.50.....		.....	Courageous	\$3.25	\$6.15	\$5.85	\$5.50.....	
.....	Adagio	4.50	8.55	8.10	7.65.....		.....	Cydonia	2.75	5.20	4.95	4.65.....	
.....	Air-Way Debut	3.25	6.15	5.85	5.50.....		.....	Dark Jewell	3.00	5.70	5.40	5.10.....	
.....	Alert	4.00	7.60	7.20	6.80.....		.....	Dawn Rose	4.00	7.60	7.20	6.80.....	
.....	Allegro	3.25	6.15	5.85	5.50.....		.....	Dee Dee Ahrens	3.00	5.70	5.40	5.10.....	
.....	Amber Glow	3.25	6.15	5.85	5.50.....		.....	Defiance	3.50	6.65	6.30	5.95.....	
.....	Ambrosia	3.50	6.65	6.30	5.95.....		.....	Drifted Snow	3.00	5.70	5.40	5.10.....	
.....	Argonne	4.00	7.60	7.20	6.80.....		.....	Dr. Longley	4.50	8.55	8.10	7.65.....	
.....	Autumn Song	3.25	6.15	5.85	5.50.....		.....	Dream Girl	4.00	7.60	7.20	6.80.....	
.....	Avalanche	3.25	6.15	5.85	5.50.....		.....	Early Bronze	2.75	5.20	4.95	4.65.....	
.....	Avalon	7.50	14.50	14.00	13.50.....		.....	Early Gold	4.00	7.60	7.20	6.80.....	
.....	Aviator	3.25	6.15	5.85	5.50.....		.....	Early Harvest	3.25	6.15	5.85	5.50.....	
.....	Bambi	3.25	6.15	5.85	5.50.....		.....	Early Wonder	3.00	5.70	5.40	5.10.....	
.....	Bamboo	4.50	8.55	8.10	7.65.....		.....	Early Yellow	2.75	5.20	4.95	4.65.....	
.....	Barbara Small	3.25	6.15	5.85	5.50.....		.....	Elizabeth Hood	7.50	14.50	14.00	13.50.....	
.....	Beacon	4.50	8.55	8.10	7.65.....		.....	Enterprise	7.50	14.50	14.00	13.50.....	
.....	Betty	3.25	6.15	5.85	5.50.....		.....	Ermine	4.50	8.55	8.10	7.65.....	
.....	Bokhara	4.00	7.60	7.20	6.80.....		.....	Fairbow	3.50	6.65	6.30	5.95.....	
.....	Bonfire	3.50	6.65	6.30	5.95.....		.....	Fashion	4.50	8.55	8.10	7.65.....	
.....	Brigadier	7.50	14.50	14.00	13.50.....		.....	Fiesta	3.50	6.65	6.30	5.95.....	
.....	Bright Forecast	4.50	8.55	8.10	7.65.....		.....	Fireside	4.50	8.55	8.10	7.65.....	
.....	Bronze Pyramid	3.25	6.15	5.85	5.50.....		.....	Flaxen Beauty	6.25	12.00	11.50	11.00.....	
.....	Burgundy	2.75	5.20	4.95	4.65.....		.....	Fragrant	3.25	6.15	5.85	5.50.....	
.....	Butterball	3.00	5.70	5.40	5.10.....		.....	Gladness	3.50	6.65	6.30	5.95.....	
.....	Calcite	3.00	5.70	5.40	5.10.....		.....	Goblin	2.75	5.20	4.95	4.65.....	
.....	Calico	4.50	8.55	8.10	7.65.....		.....	Golden Carpet	5.00	9.50	9.00	8.50.....	
.....	Canary Wonder	6.25	12.00	11.50	11.00.....		.....	Golden Hours	3.25	6.15	5.85	5.50.....	
.....	Candlelight	3.00	5.70	5.40	5.10.....		.....	Golden Spoon	2.75	5.20	4.95	4.65.....	
.....	Capt. John Smith	2.75	5.20	4.95	4.65.....		.....	Goldrush	4.50	8.55	8.10	7.65.....	
.....	Cardinal Spoon	3.50	6.65	6.30	5.95.....		.....	Harbinger	3.25	6.15	5.85	5.50.....	
.....	Carmelita	4.50	8.55	8.10	7.65.....		.....	Heather Bloom	3.00	5.70	5.40	5.10.....	
.....	Carmine Queen	4.50	8.55	8.10	7.65.....		.....	Honeycomb	3.00	5.70	5.40	5.10.....	
.....	Carnival	3.50	6.65	6.30	5.95.....		.....	Huntsman	4.50	8.55	8.10	7.65.....	
.....	Catherine Collins	3.25	6.15	5.85	5.50.....		.....	Imp. Early Wonder	3.00	5.70	5.40	5.10.....	
.....	Champion Cushion	2.75	5.20	4.95	4.65.....		.....	Inspiration	3.25	6.15	5.85	5.50.....	
.....	Charles Nye	3.25	6.15	5.85	5.50.....		.....	Irene	2.75	5.20	4.95	4.65.....	
.....	Chippewa	3.25	6.15	5.85	5.50.....		.....	James Eadie	3.25	6.15	5.85	5.50.....	
.....	Chiquita	3.25	6.15	5.85	5.50.....		.....	James Stewart	4.50	8.55	8.10	7.65.....	
.....	Chris. Columbus	3.00	5.70	5.40	5.10.....		.....	Jewell	3.00	5.70	5.40	5.10.....	
.....	Classic	4.50	8.55	8.10	7.65.....		.....	Joybringer	4.50	8.55	8.10	7.65.....	
.....	Commander Cushion	2.75	5.20	4.95	4.65.....		.....	Judith Anderson	2.75	5.20	4.95	4.65.....	
.....	Coral Sea	2.75	5.20	4.95	4.65.....		.....	Kathleen Lehman	5.00	9.50	9.00	8.50.....	

GARDEN (Hardy) VARIETIES

Quantity	Variety	50 per 50	100-250 per 100	300-450 per 100	500 up per 100	Amount	Quantity	Variety	50 per 50	100-250 per 100	300-450 per 100	500 up per 100	Amount
.....	King Midas	\$2.75	\$5.20	\$4.95	\$4.65.....		.....	Renown	\$4.50	\$8.55	\$8.10	\$7.65.....	
.....	Lavender Lady	3.50	6.65	6.30	5.95.....		.....	Robinhue	4.50	8.55	8.10	7.65.....	
.....	Lavender Lassie	5.00	9.50	9.00	8.50.....		.....	Rodell Improved	2.50	4.75	4.50	4.25.....	
.....	Lee Powell	6.25	12.00	11.50	11.00.....		.....	Rose Spoon	2.75	5.20	4.95	4.65.....	
.....	Lemonade	4.50	8.55	8.10	7.65.....		.....	Rosita	3.25	6.15	5.85	5.50.....	
.....	Magnificent	3.50	6.65	6.30	5.95.....		.....	Ruby Pompon	2.75	5.20	4.95	4.65.....	
.....	Mahogany Cushion	4.00	7.60	7.20	6.80.....		.....	Salmon Precose	3.50	6.65	6.30	5.95.....	
.....	Major Cushion	2.75	5.20	4.95	4.65.....		.....	Salute	4.50	8.55	8.10	7.65.....	
.....	Mandalay	3.25	6.15	5.85	5.50.....		.....	Sam Williston	2.75	5.20	4.95	4.65.....	
.....	Marionette	4.50	8.55	8.10	7.65.....		.....	Scarlet Crimson	3.25	6.15	5.85	5.50.....	
.....	Masquerade	3.50	6.65	6.30	5.95.....		.....	September Bronze	2.75	5.20	4.95	4.65.....	
.....	Mayford's Triumph	4.00	7.60	7.20	6.80.....		.....	September Cheer	2.75	5.20	4.95	4.65.....	
.....	Meditation	3.25	6.15	5.85	5.50.....		.....	September Dawn	3.00	5.70	5.40	5.10.....	
.....	Mellow Glow	3.50	6.65	6.30	5.95.....		.....	September Sunshine	3.25	6.15	5.85	5.50.....	
.....	M. J. Costello	3.25	6.15	5.85	5.50.....		.....	Sequoia	2.75	5.20	4.95	4.65.....	
.....	Misty Maid	7.50	14.50	14.00	13.50.....		.....	Serenade	4.50	8.55	8.10	7.65.....	
.....	Model O'Perfection	2.75	5.20	4.95	4.65.....		.....	Shalimar	5.00	9.50	9.00	8.50.....	
.....	Mogul	7.50	14.50	14.00	13.50.....		.....	Silver Ball	2.50	4.75	4.50	4.25.....	
.....	Mona	4.50	8.55	8.10	7.65.....		.....	Silverplate	4.50	8.55	8.10	7.65.....	
.....	Monogram	4.50	8.55	8.10	7.65.....		.....	Snowfall	3.50	6.65	6.30	5.95.....	
.....	Moonlight	7.50	14.50	14.00	13.50.....		.....	Spellbound	3.25	6.15	5.85	5.50.....	
.....	Morning Star	3.00	5.70	5.40	5.10.....		.....	Sunapee	3.25	6.15	5.85	5.50.....	
.....	Mrs. DuPont	2.75	5.20	4.95	4.65.....		.....	Sweepstake	4.50	8.55	8.10	7.65.....	
.....	Mrs. Fischer	2.75	5.20	4.95	4.65.....		.....	Sweetheart	4.50	8.55	8.10	7.65.....	
.....	Mrs. Rotan	3.25	6.15	5.85	5.50.....		.....	Symphony	2.75	5.20	4.95	4.65.....	
.....	Myrtle Walgreen	3.50	6.65	6.30	5.95.....		.....	Tangerine	3.25	6.15	5.85	5.50.....	
.....	Nocturne	4.50	8.55	8.10	7.65.....		.....	Tapestry	5.00	9.50	9.00	8.50.....	
.....	Nokomis	4.50	8.55	8.10	7.65.....		.....	The Chief	2.75	5.20	4.95	4.65.....	
.....	Nye's Favorite	3.50	6.65	6.30	5.95.....		.....	Tiffany Rose	2.75	5.20	4.95	4.65.....	
.....	Nytoda	7.50	14.50	14.00	13.50.....		.....	Violet	3.25	6.15	5.85	5.50.....	
.....	Old Gold	3.25	6.15	5.85	5.50.....		.....	Welcome	2.75	5.20	4.95	4.65.....	
.....	Olive Longland	2.50	4.75	4.50	4.25.....		.....	White Bounty	3.50	6.65	6.30	5.95.....	
.....	Orchid Helen	5.00	9.50	9.00	8.50.....		.....	White Cloud	3.00	5.70	5.40	5.10.....	
.....	Orchid Spoon	2.75	5.20	4.95	4.65.....		.....	White Cushion	2.75	5.20	4.95	4.65.....	
.....	Panorama	7.50	14.50	14.00	13.50.....		.....	White Spoon	2.75	5.20	4.95	4.65.....	
.....	Paper White	4.50	8.55	8.10	7.65.....		.....	White Tower	4.00	7.60	7.20	6.80.....	
.....	Patricia Lehman	5.00	9.50	9.00	8.50.....		.....	White Wonder	3.00	5.70	5.40	5.10.....	
.....	Pepita	3.50	6.65	6.30	5.95.....		.....	Winsome	4.00	7.60	7.20	6.80.....	
.....	Perfection	4.00	7.60	7.20	6.80.....		.....	Winterset	3.25	6.15	5.85	5.50.....	
.....	Pink Beauty	2.75	5.20	4.95	4.65.....		.....	Witchery	4.50	8.55	8.10	7.65.....	
.....	Pink Princess	3.50	6.65	6.30	5.95.....		.....	W. P. Snyder	3.50	6.65	6.30	5.95.....	
.....	Pink Surprise	4.00	7.60	7.20	6.80.....		.....	Wychwood	3.25	6.15	5.85	5.50.....	
.....	Polar Ice	3.50	6.65	6.30	5.95.....		.....	Yellow Avalanche	3.25	6.15	5.85	5.50.....	
.....	Polaris	4.50	8.55	8.10	7.65.....		.....	Yellow Chris. Columbus	6.25	12.00	11.50	11.00.....	
.....	Pomponette	3.00	5.70	5.40	5.10.....		.....	Yellow Blanket	3.25	6.15	5.85	5.50.....	
.....	Purple Star	2.75	5.20	4.95	4.65.....		.....	Yellow Cushion	2.75	5.20	4.95	4.65.....	
.....	Red Glow	4.00	7.60	7.20	6.80.....		.....	Yellow Irene	2.75	5.20	4.95	4.65.....	
.....	Red Gold	3.25	6.15	5.85	5.50.....		.....	Yellow Spoon	2.75	5.20	4.95	4.65.....	
.....	Red Riding Hood	3.25	6.15	5.85	5.50.....		.....	Yellow Supreme	3.00	5.70	5.40	5.10.....	
.....	Red Velvet	3.25	6.15	5.85	5.50.....		.....	Youdath's White	2.75	5.20	4.95	4.65.....	
.....	Remembrance	5.00	9.50	9.00	8.50.....		.....	Zantha	3.25	6.15	5.85	5.50.....	

SPECIAL OFFER No. 1

500 rooted cuttings, our selection; 50 each of 10 taller varieties for cutting. \$25.00.

SPECIAL OFFER No. 2

500 rooted cuttings, our selection; 50 each of 10 medium to short varieties for pots or bedding. \$25.00.

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500 rooted cutting, our selection; 50 each of 5 varieties for cutting, 50 each of 5 varieties for bedding. \$25.00.

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New, cloth bound, 226 pages. Completely revised, freely illustrated. Covers culture of Snaps (including Single Stem), full details on off season Mum growing, culture of Stocks under glass, Petunias, Asters—and over 150 more florist Crops. Price \$1.50.

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Vic Ball, editor

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PLEASE: We invite constructive criticism. If you have received stock from us that does not suit you just pencil it down here. Or if certain varieties do particularly well in your section it is equally interesting of course. Let's have a few words from you.

Carnation Cuttings for '51-'52 Season

GENERAL LIST

F.O.B. Shipping Point. Minimum order 100 of a variety except where noted. Shipment December thru spring; state when wanted.

		Rooted Cuttings		Rooted Cuttings	
		Price per		Price per	
		100	1000	100	1000
WHITE					
Mercury. Pure white sport of Giant Fisher.....	\$15.00	\$125.00			
Northland. Large, fragrant white.....	12.00	100.00			
Olivette. A good producer.....	10.00	80.00			
Patrician. A good large white.....	10.00	80.00			
White Briry (Res.). Sport of John Briry.....	12.00	100.00			
White Sim. Pure white sport of Wm. Sim.....	15.00	125.00			
White Sidney Littlefield (Res.). Pure white sport of Sidney Littlefield.....	20.00	150.00			
LIGHT PINK					
Crowley's Sim (Res.). Blush pink sport of Wm. Sim. Minimum order 1000). Available 1952-53		150.00			
Light Pink Abundance (Pat.). Large, full flowers	10.00	90.00			
Netta (Res.). Popular light pink.....	15.00	125.00			
*Portland Pink (Res.). Vivid blush pink.....	20.00	150.00			
Princess Elizabeth. Large flowered.....	20.00	150.00			
Princess Irene	15.00	125.00			
Virginia Hercules. Large sport of Virginia....	15.00	125.00			
Virginia Supreme. Light pink.....	15.00	125.00			
YELLOW					
Miller's Yellow	12.00	100.00			
*Patten's Yellow (Res.). Clear yellow; strong stem	20.00	150.00			
MEDIUM PINK					
Citation (Res.). Rose Pink.....	20.00	150.00			
Mrs. Virginia Irwin. Medium pink.....	15.00	125.00			
Mrs. Eleanor Roosevelt (Res.). Sport of Northland	20.00	150.00			
Pink Lady (Res.). Sport of Kentucky.....	20.00	150.00			
Pink Mercury. Rose pink sport of Mercury....	20.00	150.00			
Regal Pink (Res.). Large flowered soft rose pink	20.00	150.00			
Rosalie (Pat.). Flowers medium to large.....	20.00	150.00			
Virginia Rose. Uniform production, good keeper	10.00	80.00			
DARK PINK					
Canup's Pride (Res.). Good stem, free flowering	20.00	150.00			
Kentucky. Fine dark pink.....	15.00	125.00			
Sidney Littlefield (Res.). Extra large.....	20.00	150.00			
Sim Glow (Res.). Dark pink sport of Wm. Sim	20.00	150.00			
*Spicy Rose. Vivid rose pink.....	20.00	150.00			
Waltham Pink (Res.). Deep pink, large flowered	20.00	150.00			
Virginia Miller. Dark pink Virginia.....	12.00	100.00			
ORCHID					
Mrs. Bradford (Res.). Clear orchid.....	20.00	150.00			
Nancy. Dark orchid, lighter edge.....	20.00	150.00			
SALMON PINK					
Charm (Pat.). Stems long and sturdy.....	\$20.00	\$150.00			
Donna Lee. Flowers large and full.....	10.00	80.00			
*Excellence (Res.). Largest grown, medium salmon	25.00	200.00			
*Janie (Res.). Lighter than Netta and larger	22.00	180.00			
Lexington (Res.). Large salmon pink seedling	20.00	150.00			
Pollyanna (Pat.). Steady winter producer....	15.00	125.00			
Salmon Virginia	10.00	80.00			
CRIMSON and RED					
C. W. Weld. Clean, healthy grower; good stem	12.00	100.00			
*Crimson Sphynx. Good bright crimson.....	20.00	150.00			
Jumbo Cardinal (Res.). Improved Cardinal....	15.00	125.00			
No. 14 Crimson	15.00	125.00			
Olympic. Crimson seedling	12.00	100.00			
*Red Beauty. Scarlet, similar to Wm. Sim....	20.00	150.00			
Red Seth Parker. Sport of Seth Parker.....	12.00	100.00			
Red No. 16. Same color as King Cardinal....	15.00	125.00			
Tom Knipe (Pat.). Large, full flower.....	20.00	150.00			
*Topper (Res.). Rich velvety maroon.....	22.00	180.00			
Victory Red. Improved King Cardinal. Deep red	12.00	100.00			
Wm. Sim (Pat.). Vivid red seedling.....	20.00	150.00			
*Wooster Scarlet. New red.....	12.00	100.00			
VARIEGATED					
Autumn Glow (Res.). Huge orange variegated	20.00	150.00			
*Baby Bronze. Bronzy-buff with pink tinting	20.00	150.00			
Barbara Brigham. Apricot with pink pencilings	10.00	80.00			
*Butterscotch. Yellow-buff with light pink tint	20.00	150.00			
Chief Kokomo (Pat.). Pink on yellow.....	10.00	90.00			
Dairy Maid. White, pink pencilings.....	12.00	100.00			
*Geiger's Variegated Sim. White, red penciling	20.00	150.00			
Harlequin. Flecked, flesh pink.....	15.00	125.00			
Frosted Patricia. White, rose pink flaking....	10.00	80.00			
Golden Wonder. Yellow variegated.....	10.00	80.00			
*Ivory Wonder. White, flecked bright pink....	20.00	150.00			
Lavender Rose (Res.). Lavender rose seedling	20.00	150.00			
*Mohawk (Res.). Yellow variegated with pink stripes	22.00	180.00			
Mrs. E. F. Guba (Res.). Pale almond, vivid pink edges and lines.....	20.00	150.00			
Pelargonium. Mottled crimson.....	15.00	125.00			
*Raspberry Ice. White, overlaid with pale orchid	20.00	150.00			
Reina (Res.). White, flecked pink.....	15.00	125.00			
Sara Jane Knipe (Pat.). Brilliant rosy magenta, silver edged	20.00	150.00			
Scarlet King. Sport of Pelargonium.....	15.00	125.00			
Sondra (Res.). Similar to Scarlet King.....	20.00	150.00			
Sphynx (Res.). Crimson stripes on rose.....	20.00	150.00			
Starlight (Res.). Variegated white.....	15.00	125.00			
Sylvia (Res.). Variegated white.....	15.00	125.00			
Unique (Res.). Rich purple with orchid edge	20.00	150.00			
Symphony (Pat.). Mauve, purple stripes.....	20.00	150.00			
Valentine (Res.). Bright scarlet, white edge markings	20.00	150.00			
*Variegated Peter Fisher. White; dark pink	20.00	150.00			
*Weirich's Peppermint Sim. Red and white. Red penciling. Minimum order 500 cuttings			150.00		

*New outstanding 1951-52 introductions.

Pot Roses Add Increased Sales

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Patented Varieties

Variety and Description	Plant Pat. No.	*Retail Price
Betty Prior. Red buds opening to shell-pink	340	\$1.50
Chatter. Clusters of semi-double, carmine-red blooms	739	1.50
Donald Prior. Semi-double flowers of bright scarlet, flushed crimson.....	377	1.50
Fashion. Luminous coral-pink overlaid with gold	789	2.00
Geranium Red. Buds dark oxblood-red, opening to bright geranium-red.....	811	1.50
Goldilocks. Clusters of fragrant, golden yellow blooms	672	1.50
Lavender Pinocchio. A true lavender enriched by a mass of golden yellow stamens.....	947	2.00
Permanent Wave. Outside petals are rose-pink, with inside a shade lighter.....	107	1.50
Pink Bountiful. Soft pink flowers, large, delicate but lasting	601	1.50
Pinkie. Small slender pink buds opening fully to double blooms	712	1.75
Pinocchio. Small, semi-double, salmon-pink	484	1.50
Red Pinocchio. Clusters of velvety red, fragrant, semi-double blooms	812	1.50
Vogue. AARS. Glowing cherry-coral. Fragrance is rich and spicy	926	2.25
World's Fair. Large, semi-double, fragrant clusters of deep crimson	362	1.50
Yellow Pinocchio. Apricot-yellow clusters of semi-double blooms	992	1.50

AARS—All-America Award, 1952.

*This is the retail price. For your cost, find retail price in box below (left column); your cost will be on the same line under the quantity you order. For instance, for 80 Pinkie (retails at \$1.75), find \$1.75 in the left column in box. 80 plants are covered by the column headed 20-99 plants and will cost you 87½c each.



PINOCCHIO

The best of the Sweethearts—a gay, colorful Salmon Pink. Heavy producer.

Prices Patent Varieties

Retail Price (Per Variety)	Wholesale Price (Per Variety)				
	1-9 Each	10-19 Plants	20-99 Plants	100-249 Plants	250-up Plants
\$2.75.....	\$1.75	\$1.50	\$1.37½	\$1.30	\$1.20
2.50.....	1.60	1.40	1.25	1.20	1.10
2.25.....	1.40	1.25	1.12½	1.05	.95
2.00.....	1.25	1.10	1.00	.95	.85
1.75.....	1.15	1.00	.87½	.80	.75
1.50.....	1.00	.90	.75	.70	.65

Prices are "per variety" on all Patent Varieties regardless of total number of bushes on your order.

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20 **Better Times**

10 **Pink Dawn**

The varieties at left are available separately at the following prices:

20 **Red Radiance**

10 **Golden Charm**

No. 1

No. 1½

10 to 50 60c each

10 to 50 50c each

50 to 100 58c each

50 to 100 48c each

100 or more..... 55c each

100 or more..... 45c each

10 **Etoile De Hollande**

10 **K. A. Victoria**

Sold in units of 10 plants, only. F.O.B. Shipping point.

10 **Picture**

10 **Talisman**

100 **No. 1 (Collection)** \$55.00

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